

MINISTRY OF PUBLIC HEALTH, EGYPT.

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# ANNUAL REPORT

ON THE WORK OF THE

## Ministry of Public Health for the Year 1943

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Government Press, Cairo.

GOVERNMENT PUBLICATIONS are on sale at the "Sale Room"  
Ministry of Finance. Correspondence relating to these  
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# MINISTRY OF PUBLIC HEALTH

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## ANNUAL REPORT FOR THE YEAR 1943

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### Part I.—PUBLIC HEALTH

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#### Chapter I.—VITAL STATISTICS

##### A.—*Population.*

The population of Egypt as estimated in mid year 1943 was 17,423,300 inhabitants as against 17,226,700 inhabitants in 1942

##### B.—*Births.*

The number of births registered throughout Egypt during 1943 was 689,771 or a birth rate of 39.6 per thousand of population, as compared with 38.2 per thousand in 1942. Suez Governorate recorded the highest birth-rate of 84.9 per thousand population, whereas Aswan Province recorded the lowest birth-rate of 20.3 per thousand.

##### C.—*Deaths.*

A total of 492,644 deaths were registered throughout Egypt during the year under review, giving a death-rate of 28.3 per thousand of population as compared with 28.7 per thousand in 1942. The highest death-rate of 73.5 per thousand of population was recorded in Suez Governorate, and the lowest was recorded in Southern Desert Governorate, being 16.3 per thousand.

Table No. 1, gives the ratios of births, deaths and infantile mortality in Egypt (1934-1943).

##### D.—*Diseases Causing Deaths.*

Table No. 4 gives the principal diseases causing deaths in localities having a health bureau and the death-rate of each disease as compared to total deaths. According to this table, diarrhoea and enteritis figure foremost on the list with diseases of the respiratory system coming next.

##### E.—*Age and Sex Distribution of Deaths.*

Table No. 5 gives the number and rate of deaths of the different age groups in localities having a health bureau. It shows that almost half the deaths occur during the first three years of life.

##### F.—*Infantile Mortality.*

A total of 110,520 infantile deaths were recorded in Egypt, or a rate of 160 deaths per thousand births. In localities having a health bureau, 58,259 infantile deaths were registered or 21.5 per cent of births. It is still observed that diarrhoea and enteritis are mainly responsible for these deaths. Table No. 6 gives the infantile deaths in localities having a health bureau distributed according to age.



TABLE NO. 1.—SHOWING RATES OF BIRTHS, DEATHS AND INFANTILE MORTALITY  
IN EGYPT FROM 1934 TO 1943

Year	Birth-rates per 1000 population		Death-rates per 1000 population		Infantile mortality per 1000 births	
	Egypt	Urban Districts	Egypt	Urban Districts	Egypt	Urban Districts
1934 ... ..	40·3	44·4	26·6	29·5	166·4	209·9
1935 ... ..	39·4	42·5	25·1	27·7	166·6	202·5
1936 ... ..	41·8	—	27·3	—	164	—
1937 ... ..	43·5	46·1	27·2	29·8	165	206
1938 ... ..	43·4	45·7	26·4	29·5	163	206
1939 ... ..	43·2	46·8	26·0	29·3	161	200
1940 ... ..	41·6	45·9	26·5	29·5	162	199
1941 ... ..	40·8	44·2	25·9	31·0	150	200
1942 ... ..	38·2	44·4	28·7	36·2	168	228
1943 ... ..	39·6	49·8	23·3	37·2	160	225

TABLE NO. 2.—SHOWING BIRTHS, DEATHS AND INFANTILE MORTALITY IN EGYPT DURING 1943

	Estimated Population mid 1943	Births		Deaths		Infantile Mortality	
		Number	Rate	Number	Rate	Number	Rate
<i>Governorates :—</i>							
Urban (Cities only) *	2,443,900	123,974	50·7	88,443	36·2	29,413	237
Urban and Rural ...	2,591,100	129,757	50·0	92,060	35·5	30,357	234
<i>Lower Egypt :—</i>							
Urban (Bandars only)*	988,800	42,536	49·1	34,853	37·2	8,998	185
Urban and Rural ...	7,778,300	313,273	40·3	217,268	27·9	43,928	140
<i>Upper Egypt :—</i>							
Urban (Bandars only)*	922,600	44,447	48·2	38,678	41·9	10,372	233
Urban and Rural ...	7,080,200	246,736	35·0	183,316	26·0	36,235	147
<i>Egypt :—</i>							
Urban (Cities and Bandars) ... ..	4,355,300	216,957	49·8	161,974	37·2	48,783	225
TOTAL (all over Egypt)	17,423,300	689,771	39·6	492,644	28·3	110,520	160

\* Urban comprises all towns having a Health Bureau provided there is a pure drinking water installation and a municipal or local council.

TABLE No. 3.—SHOWING THE HIGHEST AND LOWEST BIRTH AND DEATH RATES DURING 1943  
IN GOVERNORATES, PROVINCES AND TOWNS HAVING A HEALTH BUREAU

	Govts., Prov. or Town having a Health Bureau	Rate per Thousand
<b>BIRTHS</b>		
Governorate or Province with highest birth-rate ... ..	Suez Governorate ...	84.9
"                    "          "          lowest          "          ... ..	Aswan Province ...	20.3
Town or Bandar (chief town) with highest birth-rate ... ..	Suez ... ..	89.2
"          "          "          "          "          lowest          "          ... ..	Daraw ... ..	10.6
<b>DEATHS</b>		
Governorate or Province with highest death-rate ... ..	Suez Governorate ...	73.5
"                    "          "          lowest          "          ... ..	Western Desert ...	16.3
Town or Bandar (chief town) with highest death-rate ... ..	Busalia Kibli ...	130.8
"          "          "          "          "          lowest          "          ... ..	Port Fouad ... ..	7.3
<b>INFANTILE MORTALITY</b>		
Governorate or Province with highest infantile mortality ... ..	Alexandria ... ..	250
"                    "          "          lowest          "          "          ... ..	Qena Province ...	95
Town or Bandar (chief town) with highest infantile mortality ... ..	Enu ... ..	482
"          "          "          "          "          lowest          "          "          ... ..	Sidi Salem ... ..	33

The birth-rate for all the population of Egypt was 39·6 per thousand.

TABLE NO. 4.—SHOWING DISEASES CAUSING DEATHS IN ALL LOCALITIES HAVING A HEALTH BUREAU DURING 1943

Disease	Total Number of Deaths	Death-rate per 1000 of Total Deaths
Notifiable infectious and parasitic diseases exclusive of those marked * hereunder ... ..		
Pulmonary tuberculosis* ... ..	9,375	45·6
Other tuberculous diseases ... ..	3,52	17·1
Syphilis ... ..	575	2·8
Malaria* ... ..	380	1·9
Dysentery ... ..	2,361	11·5
Pneumonia (acute, chronic and non-chronic, including broncho-pneumonia and capillary bronchitis) ... ..	659	3·2
Bronchitis ... ..	8,139†	39·7
Other respiratory system diseases ... ..	15,986	77·9
Heart diseases ... ..	2,907	14·2
Other diseases of the circulatory system ... ..	4,678	2·8
Diseases of urinary and genital system (other than Venereal) ... ..	1,513	7·4
Diseases of puerperium and delivery (other than puerperal septicemia) ... ..	8,330	40·6
Diseases of diarrhoea and enteritis ... ..	779	3·8
Senility ... ..	72,028	350·9
Accidental deaths including suicides ... ..	23,623	115·1
Other causes ... ..	6,599	32·2
	43,822	213·5
<b>TOTAL DEATHS</b> ... ..	<b>205,246</b>	—

† This figure includes 8,176 deaths from acute pneumonia (Lobar or bronchial).



**TABLE NO. 5.—SHOWING THE AGE AND SEX DISTRIBUTION OF DEATHS IN LOCALITIES HAVING  
A HEALTH BUREAU DURING 1943**

					Number of Deaths			
					Male	Female	Total	Percentage to Total Deaths
Less than one year	...	...	...	...	30,773	27,486	58,259	28·4
1- 2 years	...	...	...	...	14,250	14,183	28,433	13·9
2- 3 „	...	...	...	...	7,375	7,629	15,004	7·3
3- 4 „	...	...	...	...	3,317	3,024	6,341	3·1
4- 5 „	...	...	...	...	1,659	1,513	3,172	1·5
5-10 „	...	...	...	...	3,297	2,847	6,144	3·0
10-15 „	...	...	...	...	2,170	1,472	3,642	1·8
15-20 „	...	...	...	...	2,043	1,497	3,540	1·7
20-25 „	...	...	...	...	2,760	1,532	4,292	2·1
25-30 „	...	...	...	...	3,057	1,961	5,018	2·4
30-35 „	...	...	...	...	3,021	2,049	5,070	2·5
35-40 „	...	...	...	...	3,379	2,048	5,427	2·6
40-45 „	...	...	...	...	3,230	1,978	5,208	2·5
45-50 „	...	...	...	...	2,786	1,447	4,233	2·1
50-55 „	...	...	...	...	3,597	2,161	5,758	2·8
55-60 „	...	...	...	...	2,095	1,134	3,229	1·6
60-65 „	...	...	...	...	3,783	2,438	6,221	3·0
65-70 „	...	...	...	...	2,827	1,790	4,617	2·2
70-75 „	...	...	...	...	4,415	3,635	8,050	3·9
75-80 „	...	...	...	...	1,964	1,566	3,530	1·7
80-85 „	...	...	...	...	3,434	4,248	7,682	3·7
85-90 „	...	...	...	...	1,043	1,190	2,233	1·1
90-95 „	...	...	...	...	2,551	3,456	6,007	2·9
95 years and upwards	...	...	...	...	1,476	2,556	4,032	2·0
Unknown	...	...	...	...	88	16	104	0·1
TOTAL					101,390	94,856	205,246	—

TABLE NO. 6.—SHOWING THE AGE AND SEX DISTRIBUTION OF INFANTILE MORTALITY IN LOCALITIES  
HAVING A HEALTH BUREAU DURING 1943

Age							Male	Female	Total	Death-rate per 100 Births	Death-rate per 100 Death
0- 1 month	...	...	...	...	...	...	5,782	4,680	10,462	3.9	5.1
1- 2 months	...	...	...	...	...	...	2,244	1,977	4,221	1.6	2.1
2- 3    ,,	...	...	...	...	...	...	2,545	2,182	4,727	1.7	2.3
<b>0- 3    ,,</b>	...	...	...	...	...	...	<b>10,571</b>	<b>8,839</b>	<b>19,410</b>	<b>7.2</b>	<b>9.5</b>
3- 4    ,,	...	...	...	...	...	...	2,678	2,464	5,142	1.9	2.5
4- 5    ,,	...	...	...	...	...	...	2,713	2,563	5,326	2.0	2.6
5- 6    ,,	...	...	...	...	...	...	2,367	2,190	4,557	1.7	2.2
<b>3- 6    ,</b>	...	...	...	...	...	...	<b>7,808</b>	<b>7,217</b>	<b>15,025</b>	<b>5.5</b>	<b>7.3</b>
6- 7    ,,	...	...	...	...	...	...	2,916	2,674	5,590	2.1	2.7
7- 8    ,,	...	...	...	...	...	...	2,122	2,050	4,172	1.5	2.0
8- 9    ,,	...	...	...	...	...	...	2,710	2,421	5,131	1.9	2.5
<b>6- 9    ,,</b>	...	...	...	...	...	...	<b>7,748</b>	<b>7,145</b>	<b>14,893</b>	<b>5.5</b>	<b>7.3</b>
9-10   ,,	...	...	...	...	...	...	1,880	1,727	3,607	1.3	1.8
10-11   ,,	...	...	...	...	...	...	1,762	1,598	3,360	1.2	1.6
11-12   ,,	...	...	...	...	...	...	1,004	960	1,964	0.7	1.0
<b>9-12   ,,</b>	...	...	...	...	...	...	<b>4,646</b>	<b>4,285</b>	<b>8,931</b>	<b>3.3</b>	<b>4.4</b>
GRAND TOTAL							39,773	27,486	58,259	21.5	28.4

TABLE NO. 7.—SHOWING DISEASE DISTRIBUTION OF INFANTILE MORTALITY IN LOCALITIES HAVING  
A HEALTH BUREAU DURING 1943

Disease												Number of Deaths	Rate per 1000 to Total Births	Rate per 1000 to Total Infantile Mortality
Measles	...	...	...	...	...	...	...	...	...	...	...	99	0.4	1.7
Whooping Cough	...	...	...	...	...	...	...	...	...	...	...	43	0.2	0.7
Diphtheria	...	...	...	...	...	...	...	...	...	...	...	81	0.3	1.4
Tuberculous Diseases	...	...	...	...	...	...	...	...	...	...	...	19	0.1	0.3
Syphilis	...	...	...	...	...	...	...	...	...	...	...	234	0.9	4.0
Rickets and Osteomalacia	...	...	...	...	...	...	...	...	...	...	...	183	0.7	3.1
Convulsions	...	...	...	...	...	...	...	...	...	...	...	200	0.7	3.4
Bronchitis	...	...	...	...	...	...	...	...	...	...	...	3,522	13.0	60.5
Broncho-Pneumonia	...	...	...	...	...	...	...	...	...	...	...	1,036	3.8	17.8
Pneumonia	...	...	...	...	...	...	...	...	...	...	...	301	1.1	5.2
Diarrhoea and Enteritis	...	...	...	...	...	...	...	...	...	...	...	33,230	122.7	570.4
Congenital Defects of Conformation	...	...	...	...	...	...	...	...	...	...	...	78	0.3	1.3
Congenital Debility	...	...	...	...	...	...	...	...	...	...	...	16,895	62.4	290.0
Premature Birth	...	...	...	...	...	...	...	...	...	...	...	195	0.7	3.3
Consequences of Delivery	...	...	...	...	...	...	...	...	...	...	...	80	0.3	1.4
Infanticide	...	...	...	...	...	...	...	...	...	...	...	126	0.5	2.2
Accidents	...	...	...	...	...	...	...	...	...	...	...	96	0.4	1.6
Other Causes	...	...	...	...	...	...	...	...	...	...	...	1,841	6.8	31.6
TOTAL												58,259	215.1	





TABLE No. 9.—BIRTHS AND DEATHS RETURN FOR EGYPT, 1943

Governorates and Provinces		Estimated Population mid 1943	Births			Deaths			Infantile Mortality	
			Egyptians	Foreigners	Total	Rate per 1000 Population	Egyptians	Foreigners	Total	Rate per 1000 Population
<b>Governorates :—</b>										
Cairo ... ..	...	1,433,500	75,445	733	76,148	53·1	53,320	745	54,065	37·7
Alexandria ... ..	...	742,900	31,559	1,217	32,966	44·4	23,142	1,171	24,313	32·7
Ismailia (including suburbs) ... ..	...	58,700	3,470	135	3,605	61·4	2,309	102	2,411	41·1
Port Said (including suburbs) ... ..	...	130,100	6,486	121	6,207	44·9	3,238	155	3,393	24·6
Suez (including suburbs) ... ..	...	56,000	4,244	32	4,756	84·9	4,030	88	4,118	73·5
Damietta ... ..	...	45,700	1,833	—	1,833	40·1	977	—	977	21·4
Sinai ... ..	...	19,000	974	3	977	50·1	531	—	531	27·2
Southern Desert ... ..	...	32,500	1,342	—	1,342	41·3	1,144	—	1,144	35·2
Western Desert ... ..	...	57,400	1,601	12	1,613	28·1	934	—	934	16·3
Red Sea District ... ..	...	10,500	300	—	300	2·6	174	—	174	16·6
TOTAL ... ..	...	2,594,800	157,504	2,253	159,757	50·0	89,799	2,261	92,060	35·5
<b>Lower Egypt Provinces :—</b>										
Behera... ..	...	1,154,100	41,462	3	41,465	35·9	26,175	7	26,182	22·7
Dakahlia ... ..	...	1,335,000	55,816	9	55,825	41·8	41,236	9	41,445	30·9
Gharbia ... ..	...	2,118,000	85,680	8	85,688	39·7	60,753	25	60,778	28·2
Menoufia ... ..	...	1,247,400	50,653	2	50,660	40·6	37,971	5	37,976	30·4
Kalubia ... ..	...	661,700	29,799	1	29,800	44·8	19,585	4	19,589	29·5
Sharkia ... ..	...	1,218,000	49,837	3	49,840	40·9	31,489	9	31,498	25·8
TOTAL ... ..	...	7,778,300	313,252	26	313,278	40·3	217,209	59	217,268	27·9
<b>Upper Egypt Provinces :—</b>										
Assiut... ..	...	317,500	6,456	—	6,456	20·3	14,942	1	14,943	47·1
Beni Suef ... ..	...	1,321,400	47,802	4	47,806	36·2	33,789	—	33,789	25·6
Fayoum ... ..	...	610,000	22,174	1	22,175	35·9	13,997	3	14,000	22·7
Girga ... ..	...	648,500	25,041	—	25,041	40·1	18,131	1	18,132	27·9
Giza ... ..	...	1,228,700	41,318	1	41,319	33·1	27,500	1	27,501	22·3
Minia ... ..	...	767,100	34,038	107	34,145	44·5	24,094	136	24,230	31·6
Qena ... ..	...	1,014,200	38,097	7	38,104	37·6	25,935	9	25,944	25·6
TOTAL ... ..	...	1,114,600	30,627	3	30,630	27·5	24,345	2	24,347	21·9
TOTAL ... ..	...	7,050,200	246,613	123	246,736	35·0	183,163	153	183,316	26·0
GRAND TOTAL ... ..	...	17,423,300	687,369	2,402	689,771	39·6	490,171	2,473	492,644	28·3



## Chapter II.—INFECTIOUS DISEASES

Table No. 14 is a statement of the more important infectious diseases recorded during 1942 and 1943, distributed according to governorates and provinces. Table No. 15 gives the case-mortality-rates during the last three years.

### *Typhus.*

Table No. 10 shows the typhus cases and deaths recorded during the last five years together with their ratios to population.

TABLE No. 10

Year	Number of Cases	Rate per 100,000 Population	Number of Deaths	Rate per 100,000 of Population	Case-Mortality Rate per cent
1939 ... ..	4,296	26	788	4·8	18·3
1940 ... ..	4,416	26	863	5·1	19·5
1941 ... ..	9,414	56	1,751	10·4	18·6
1942 ... ..	22,054	128	4,411	25·8	20·0
1943 ... ..	40,188	230	8,252	47·4	20·5

It will be observed from this table that the case rate per hundred thousand population is almost twice the 1942 rate and four times the 1941 rate. The increase is mainly attributed to the arrival into Egypt of large numbers of immigrants which was occasioned by the present war.

Table No. 16 gives the four weekly distribution of typhus cases during 1943 as compared with corresponding periods in previous years as far back as 1935. Table No. 17 gives the number of typhus cases and deaths, their ratios to population and the case-mortality-rate in Egypt during the years 1905 -- 1943. It will be observed from this table that the prevalence of the disease and the case-mortality rates were less during the present war than during World War I, with the exception of the year under review when 40,188 cases were recorded which represent the highest number on record since 1905.

### *Plague.*

The total number of cases of plague reported during the year was 163. The following table No. 11 shows the incidence of Plague during the last four years :—

TABLE No. 11

Year	Bubonic			Septicaemic			Pneumonic			Total				
	Cases	Deaths	Ratio	Cases	Deaths	Ratio	Cases	Deaths	Ratio	C.	R.	D.	R.	CMR
														%
1940	395	146	36·9%	92	92	100 %	4	4	100 %	491	2·9	242	1·4	49·2
1941	14	6	42·9%	—	—	—	—	—	—	14	·0	6	·03	42·9
1942	7	3	42·9%	3	3	100 %	4	4	100 %	15	·09	10	·06	66·5
1943	149	95	63·7%	14	14	100 %	—	—	—	163	·93	109	·6	66·8



### *Distribution of Cases.*

Plague was this year confined to Suez and Port Said cities. It was severer in the former where 156 cases were recorded : 25 cases in November and 131 cases in December. The other seven cases occurred in Port Said : 3 in July, 2 in August, 1 in October and one in December.

### *Anti-Plague-Vaccination.*

No wonder the vaccination against plague was mainly directed to the two afflicted cities and to Suez in particular where a total of 46,247 persons were vaccinated. Some 4,738 persons were vaccinated in Port Said. Other vaccinations were carried out as a precautionary measure in certain localities in Sharkia, Beni Suef, Assiut and Gerga Provinces.

### *Deratization.*

The stationary posts set up in 1941 for the deratization of rivercraft were still in operation preventing the escape of rats from the ports to the interior or vice versa. As mentioned before, these exist at the following localities :—

- (1) Mouth of Ismailia Canal to Shubra.
- (2) Mouths of Tewfiki, Menoufi and Beheri *Rayyahs* in the Delta Barrage.
- (3) Mouths of Ibrahimia, Yusfi and Walidi canals near Assiut.

Other stations were set up in 1942 at Deirut town, Athar el Nabi Bank, Ismailia Canal-lock and Mahmoudia. During 1943, some 39,822 rivercraft were supplied with traps which caught 105,998 live and 5,262 dead rats. These posts together with the almost negligible amount of imported goods transported to the interior by water ways had a direct bearing on the disappearance of plague from the interior of the country.

### *Thyphoid and Para-Typhoid.*

4,430 cases with 790 deaths were notified during the year or a case-rate of 25.4 and a death-rate of 4.5 per 100,000 of population, and a case-mortality-rate of 17.8 per cent as against 6814 cases and 1257 deaths during the preceding year and a case-rate of 39 and a death-rate of 7 per 100,000 of population and a case-mortality-rate of 18.4 per cent; The decrease in the incidence of the disease during this year was marked in Cairo and Alexandria, and slight in most provinces except Ismailia, Port Said, Damietta, Frontiers Districts, Gharbia and Gerga which showed a slight increase.

### *Small Pox.*

The number of small pox cases recorded this year was 4138 as against nothing in the preceding year. Investigations revealed that the disease was imported from the Hedjaz by returning pilgrims. The first cases were reported in Cairo and Gharbia province, after which the disease spread to all the other governorates and provinces, Damietta governorate excepted. Table No. 14 gives the distribution of cases and deaths. 384 deaths from small pox were recorded giving a case-mortality-rate of 9.2 per cent. The incidence was severest in Cairo and Assiut.

### *Anti Small Pox Vaccination.*

In view of the occurrence of small pox in almost all the country, a general vaccination of the whole population was carried out, a total of 13,721,811 persons being vaccinated during the year. Vaccination was continued during the following year in certain localities.

### *Cerebro Spinal Meningitis.*

Some 114 cases with 57 deaths were reported during the year or a case-rate of 0.65 and a death-rate of 0.32 per 100,000 of population. This gives a case-mortality-rate of 50 per cent as against 212 cases and 101 deaths during 1942 or a case-rate of 1.2 and a death-rate of 0.6 per 100,000 of population and a case-mortality-rate of 47.6 per cent. The greater part of the cases was reported from Cairo, Alexandria and Port-Said.

### *Diphtheria.*

The number of cases of diphtheria notified during the year was 4143 with 1595 deaths or a case-rate of 23.8 and a death-rate of 9.1 per 100,000 of population, and a case-mortality-rate of 38.4 per cent as compared with 3950 cases and 1882 deaths during 1942 or a case-rate of 22.9 and a death-rate of 10.9 per 100,000 of population and a case-mortality-rate of 47.6 per cent. There were more cases this year than in 1942 in Cairo, Port-Said, Suez Frontiers Districts, Giza, Gharbia, Aswan, Fayoum and Behera; and less cases in Alexandria, Ismailia, Damietta, Dakahlia, Menoufia, Kaliubia, Sharkia, Assiut, Beni-Suef, Gerga Minia and Qena provinces.

### *Diphtheria Anatoxin Immunization.*

A total of 110,397 children between one and ten years of age received the three anatoxin injections this year. Of these, 190 children contracted diphtheria after inoculation and were distributed as follows: 118 in Cairo, 62 in Alexandria, 7 in Dakahlia and 3 in Sharkia.

### *Measles.*

4249 cases of measles with 1022 deaths were notified this year or a case rate of 24.4 and a death-rate of 5.9 per 100,000 of population and a case-mortality-rate of 21 per cent as against 9764 cases and 3654 deaths in 1942 or a case-rate of 56.6 and a death-rate of 21.2 per 100,000 of population and a case-mortality-rate of 37.4 per cent. More cases than in 1942 were recorded in Alexandria and Behera whereas there were less cases in the remaining governorates and provinces.

### *Influenza.*

14056 cases of Influenza were notified during the year with 219 deaths or a case rate of 80.6 and a death-rate of 1.3 per 100,000 of population and a case-mortality-rate of 1.5 per cent as against 12,965 cases with 218 deaths in 1942 or a case-rate of 75.3 and a death-rate of 1.3 per 100,000 of population and a case-mortality-rate of 1.7 per cent.

### *Pneumonia.*

6935 cases of pneumonia with 5762 deaths were notified this year or a case-rate of 39.8 and a death-rate of 33 per 100,000 of population and a case-mortality-rate of 83 per cent as against 6215 cases and 5296 deaths in 1942 or a case-rate of 36.1 and a death-rate of 30 per 100,000 of population and a case-mortality-rate of 85.2 per cent.

### *Fever Hospitals.*

During the year, there were 20 fever hospitals, 15 Village Shelters, and 28 cordons in tents in service. A total of 67,460 patients composed of 45160 males and 22300 females were admitted to these hospitals during the year. Of these, 58426 or 38987 males and 19439 females recovered and 6798 or 4445 males and 2353 females died.



*Pilgrims.*

15,771 Egyptian Pilgrims proceeded to the Hedjaz this year. The number of returning pilgrims who passed through Tor lazaret was 15,839. 49 Egyptian pilgrims died in the Hedjaz.

The following table No. 12. gives details of pilgrims isolated in Tor lazaret for developing infectious diseases :—

Table 12.

Pilgrims	Tor Lazaret Personnel
Small Pox ... .. 26	Influenza ... .. 3
Dysentery ... .. 30	Small Pox ... .. 1
Pneumonia ... .. 8	T. B. ... .. 1
Influenza ... .. 6	Dysentery ... .. 1
Erysipelas ... .. 2	Bronchitis and Influenza ... .. 1
Malaria... .. 1	
Paratyphoid ... .. 1	
Total ... .. 74	Total ... .. 7

The following table No. 13 gives details of deaths inside and outside the hospital at Tor lazaret :

Table No. 13

Inside Hospital	Outside Hospital
Pneumonia and General Debility ... .. 2	Senility and General debility (Egypt) ... 2
Acute bacillary Dysentery ... .. 2	Diarrhoea ... .. 2
Senility and General debility ... .. 1	Acute Dysentery ... .. 1
Uraemia ... .. 1	Heart failure ... .. 1
Paratyphoid ... .. 1	Senility and General debility (Syrian) ... 2
Gangrene of the right foot and Septicaemia ... .. 1	
Total ... .. 8	Total ... .. 8

TABLE No. 14—Cases and Deaths of Chief Infectious Diseases Notified during 1942.

Governorate or Province	Year	Small Pox		Plague		Typhus		Typhoid		Cerebro-Spinal Meningitis		Diphtheria	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Cairo ...	1942	—	—	—	—	2,244	554	3,560	650	102	39	1,662	53
	1943	1,193	96	—	—	8,751	1,912	2,227	405	48	14	2,131	58
Alexandria	1942	—	—	—	—	524	151	1,516	256	35	22	524	19
	1943	111	15	—	—	1,473	388	844	132	27	16	493	13
Israilia ...	1942	—	—	1	—	85	31	37	12	1	1	24	1
	1943	20	3	—	—	311	115	38	2	1	—	10	—
Port-Said ...	1942	—	—	14	10	68	7	207	30	17	6	54	1
	1943	46	2	7	3	260	23	332	29	9	4	75	1
Damietta ...	1942	—	—	—	—	—	6	3	1	1	1	8	3
	1943	—	—	—	—	14	11	9	3	—	—	6	—
Suez ...	1942	—	—	—	—	91	28	171	20	19	8	34	1
	1943	4	1	156	106	1,148	256	104	24	1	1	39	2
Frontiers ...	1942	—	—	—	—	113	18	32	6	—	—	—	—
	1943	12	—	—	—	225	3	35	2	1	—	10	—
Behera ...	1942	—	—	—	—	2,788	628	110	17	2	1	116	7
	1943	2	1	—	—	3,948	731	70	17	3	1	127	6
Dakahlia ...	1942	—	—	—	—	4,069	708	71	25	5	3	288	20
	1943	7	1	—	—	3,004	575	35	7	3	4	187	10
Gharbia ...	1942	—	—	—	—	4,978	870	94	27	13	9	263	21
	1943	443	27	—	—	4,400	1,007	109	25	6	4	281	16
Menoufia ...	1942	—	—	—	—	2,367	426	99	17	1	4	206	11
	1943	24	1	—	—	3,166	612	54	16	1	2	130	8
Kaliubia ...	1942	—	—	—	—	363	110	115	16	2	1	121	8
	1943	98	5	—	—	1,655	305	65	17	3	2	119	5
Sharkia ...	1942	—	—	—	—	1,477	274	75	15	6	3	124	9
	1943	22	2	—	—	3,785	697	38	14	3	3	92	5
Aswan ...	1942	—	—	—	—	63	14	17	3	1	—	13	—
	1943	16	1	—	—	451	62	5	2	1	—	33	1
Assiut ...	1942	—	—	—	—	756	76	167	47	—	1	98	4
	1943	1,102	127	—	—	700	191	140	23	2	—	62	4
Beni Suef ...	1942	—	—	—	—	411	72	85	13	—	—	70	3
	1943	236	24	—	—	725	130	49	4	4	4	60	4
Fayoum ...	1942	—	—	—	—	8	1	36	18	1	—	27	1
	1943	48	4	—	—	22	6	36	9	—	1	37	2
Girga ...	1942	—	—	—	—	352	73	22	11	1	—	34	3
	1943	175	23	—	—	1,208	257	43	13	—	—	31	2
Giza ...	1942	—	—	—	—	1,481	296	171	28	5	2	76	4
	1943	326	31	—	—	3,680	689	123	23	—	—	136	9
Minia ...	1942	—	—	—	—	55	14	95	18	—	—	61	4
	1943	83	9	—	—	144	46	47	14	1	1	58	4
Qena ...	1942	—	—	—	—	165	54	31	17	—	—	49	3
	1943	170	11	—	—	1,118	256	27	9	—	—	26	1
TOTAL ...	1942	—	—	15	10	22,054	4,411	6,814	1,257	212	101	3,950	1,88
	1943	4,138	384	163	119	40,188	8,272	4,430	790	114	57	4,143	1,58
Pate per Million ...	1942	—	—	·8	·6	1,280	256	361	73	12	6	229	10
	1943	237	22	9·3	6·2	2,304	474	254	45	6·5	3·2	238	9



AND 1943 AND THEIR DISTRIBUTION ACCORDING TO GOVERNORATES AND PROVINCES

Measles		Tuberculosis		Acute Pneumonia		Influenza.		Malaria		Total of other Diseases		GENERAL TOTAL	
C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
1,724	1,090	3,180	1,484	2,730	2,405	1,992	27	601	14	3,148	683	20,940	7,480
271	133	3,330	1,638	3,192	2,793	2,220	25	573	30	2,557	808	26,495	8,497
131	29	1,284	461	1,545	95	4,930	11	1,933	10	1,552	264	13,934	2,397
576	129	1,559	659	2,329	1,887	4,053	8	991	21	1,939	302	14,395	3,696
12	3	5	12	10	27	85	1	1,759	10	35	14	2,052	130
—	—	5	12	5	40	159	—	440	6	27	19	1,016	198
28	3	150	52	81	17	163	—	160	2	251	26	1,293	172
14	1	159	67	94	33	246	—	149	1	172	30	1,563	210
15	—	32	22	9	5	36	1	17	—	91	7	212	74
3	—	53	50	10	3	30	2	22	—	41	7	188	84
29	8	22	39	210	85	595	12	287	13	389	57	1,847	298
17	5	25	55	89	55	701	15	471	39	162	54	2,917	633
6	1	6	5	5	4	70	5	462	—	78	11	826	50
1	—	9	5	8	5	109	9	286	1	158	—	854	26
139	79	142	157	118	96	450	16	1,191	4	356	110	5,412	1,179
564	79	109	179	111	142	355	10	713	3	394	107	6,436	1,313
1,166	283	317	165	111	145	650	24	134	2	750	105	7,591	1,667
414	87	338	135	90	63	749	15	60	—	356	84	5,243	1,074
555	215	113	183	147	445	844	19	264	4	1,049	185	8,620	2,170
505	116	292	195	106	232	845	10	22	4	743	123	7,957	1,904
415	90	104	72	149	77	746	25	57	—	580	100	5,024	923
220	16	63	43	59	30	540	6	47	1	512	79	4,816	889
587	83	101	57	121	49	438	8	1,738	—	555	85	4,141	490
167	22	64	37	79	28	645	4	1,395	—	334	41	4,624	515
708	193	173	122	62	46	287	6	247	1	428	58	3,787	808
197	28	143	74	34	42	423	3	619	3	215	47	5,571	971
138	19	28	26	34	9	113	5	7,219	285	410	14	8,036	383
84	15	8	6	11	6	42	—	3,653	553	96	8	4,460	668
1,078	567	151	174	245	232	347	14	185	1	828	133	3,458	1,319
348	136	161	105	216	132	806	41	152	2	1,112	115	4,801	912
267	56	52	64	107	87	231	6	72	5	226	36	1,521	376
101	14	47	48	131	24	734	28	75	3	179	47	2,344	369
36	12	119	86	56	20	47	1	1,297	7	318	44	1,945	207
17	—	136	64	82	33	7	1	793	1	208	28	1,454	170
475	126	62	40	79	51	170	13	1,879	11	328	67	3,401	423
398	195	19	25	87	53	418	18	214	6	259	43	2,732	655
759	284	164	141	218	300	463	6	92	—	329	93	3,758	1,190
36	6	112	120	44	69	413	5	96	2	188	34	5,154	1,071
724	354	113	60	61	144	112	13	48	1	613	95	1,882	748
26	23	73	44	80	63	148	8	55	1	204	49	1,200	301
418	159	57	50	117	57	196	5	1,095	24	512	97	2,640	495
49	17	65	38	75	29	301	11	546	66	249	41	7,511	1,090
9,764	3,654	6,608	3,472	6,215	5,296	12,965	218	20,977	394	12,826	2,254	102,360	22,949
4,249	1,032	6,770	3,647	6,935	5,762	14,056	219	16,530	1,341	99,85	2,066	111,701	25,266
566	212	383	202	361	307	753	13	1,215	23	725	131	5,912	1,332
244	69	388	209	398	330	806	13	948	77	572	118	6,405	1,449

**Remark :** No cases or deaths of Cholera during 1942

" " " " " 1943



TABLE No. 15.—SHOWING NUMBER OF CASES OF NOTIFIABLE INFECTIOUS DISEASES RECORDED DURING THE LAST 3 YEARS AND THE CASE MORTALITY RATES

Disease	1941			1942			1943		
	Cases	Deaths	C.M.R.	Cases	Deaths	C.M.R.	Cases	Deaths	C.M.R.
Plague... ..	14	6	42·9	15	10	66·7	163	119	66·8
Typhus ... ..	9,414	1,751	18·6	22,054	4,411	20·0	40,188	8,272	20·5
Typhoid and Paratyphoid ... ..	5,758	1,179	20·5	6,814	1,257	18·4	4,430	790	17·8
Scarlet Fever ... ..	91	—	—	39	2	5·1	54	3	5·5
Cerebro-Spinal Fever ... ..	159	94	59·1	212	101	47·6	114	57	50·0
Diphtheria ... ..	4,037	1,931	47·8	3,950	1,832	47·6	4,143	1,595	38·4
Measles ... ..	9,769	2,864	29·3	9,764	3,654	37·4	4,249	1,022	24·0
T.B. of Lungs ... ..	6,296	3,026	48·0	6,608	3,472	52·5	6,770	3,647	53·8
T.B. of other organs ... ..	84	501	—	157	525	—	104	544	—
Chicken-pox ... ..	1,862	15	0·8	870	8	0·9	1,238	21	1·6
Puerperal Infection... ..	461	344	74·6	332	208	62·7	375	187	49·8
Dysentery ... ..	3,447	508	14·7	3,553	577	16·2	1,873	604	32·2
Influenza ... ..	11,120	178	1·6	12,965	218	1·7	14,056	219	1·5
Anthrax ... ..	22	5	22·7	21	4	19·0	15	9	60·0
Enceph. Letha.... ..	7	9	—	6	5	83·3	4	3	75·0
Whooping Cough ... ..	2,923	173	5·9	2,257	142	6·3	2,054	105	5·1
Mumps ... ..	1,755	19	1·1	1,453	30	2·1	1,449	31	2·1
Undulant Fever ... ..	20	—	—	9	2	22·2	6	4	66·6
Leprosy ... ..	511	79	15·5	520	82	15·8	393	68	17·3
Rabies... ..	30	34	—	44	43	97·7	17	19	—
Tetanus ... ..	433	314	72·5	459	313	68·2	442	294	66·5
Acute Polio-Myelitis ... ..	16	9	56·2	5	1	20·0	7	2	28·5
Dengue ... ..	—	—	—	—	—	—	2	—	—
Erysipelas ... ..	4,502	465	10·3	3,100	312	10·1	1,956	209	10·6
Malaria ... ..	9,320	104	1·1	20,937	394	1·9	16,530	1,341	8·1
Jaundice ... ..	3	2	66·6	1	—	—	2	1	50·0
Small-pox ... ..	—	—	—	—	—	—	4,138	384	9·2
Relapsing Fever ... ..	—	—	—	—	—	—	—	—	—
Acute Pneumonia ... ..	5,414	4,842	89·4	6,215	5,296	85·2	6,935	5,762	83·0
Glanders ... ..	—	—	—	—	—	—	—	—	—
TOTAL ... ..	77,468	18,452	23·8	102,360	22,949	22·4	111,708	25,284	22·6

**TABLE No. 16.—GIVES THE FOUR-WEEKLY DISTRIBUTION OF TYPHUS CASES  
DURING THE PERIOD FROM 1935—1943 (17-12-1943).**

Weeks	1935	1936	1937	1938	1939	1940	1941	1942	1943
1- 4 ... ..	143	185	109	60	76	186	416	1,236	2,094
5- 8 ... ..	585	388	195	182	334	531	855	2,331	3,293
9-12 ... ..	561	461	157	285	804	980	1,739	3,145	4,730
13-16 ... ..	694	592	259	491	876	966	1,898	4,469	7,383
17-20 ... ..	573	427	675	726	908	777	1,796	4,623	9,408
21-24 ... ..	270	350	385	506	631	407	1,211	2,689	6,123
25-28 ... ..	143	242	164	203	345	250	425	1,337	3,834
29-32 ... ..	53	41	63	103	133	102	234	527	1,758
33-36 ... ..	31	12	35	70	46	68	92	190	591
37-40 ... ..	17	9	8	19	16	26	20	142	221
41-44 ... ..	6	10	10	8	13	22	31	152	275
45-48 ... ..	24	15	10	9	11	29	235	291	114
49-52 ... ..	51	25	13	49	103	72	462	922	347
<b>TOTAL</b>	<b>3,151</b>	<b>2,757</b>	<b>2,083</b>	<b>2,811</b>	<b>4,296</b>	<b>4,416</b>	<b>9,414</b>	<b>22,054</b>	<b>40,171</b>

TABLE NO. 17—SHOWING NUMBER OF TYPHUS CASES AND DEATHS AND THEIR RATIOS TO A  
MILLION OF POPULATION AND CASE-MORTALITY-RATES PER CENT.

Year	No. of Cases	Ratio of Cases per 1,000,000	No. of Deaths	Ratio of Deaths per 1,000,000	Case Mortality Rate	Year	No. of Cases	Ratio of Cases per 1,000,000	No. of Deaths	Ratio of Deaths per 1,000,000	Case Mortality Rate
1905	2,478	226	1,111	101	44.8	1925	1,314	94	290	21	22.1
1906	1,668	150	938	84	56.2	1926	966	68	201	14	20.8
1907	1,063	94	836	74	78.6	1927	794	56	189	13	23.8
1908	2,926	255	1,153	101	39.4	1928	599	41	138	9	23.0
1909	3,782	326	1,608	139	42.5	1929	1,141	78	214	15	18.8
1910	2,908	248	1,210	103	41.6	1930	288	19	74	5	25.7
1911	5,151	433	1,702	143	33.0	1931	265	18	57	4	21.5
1912	5,382	447	1,658	138	30.8	1932	2,298	153	399	26	17.5
1913	4,936	405	1,438	118	29.1	1933	7,865	515	1,332	87	16.9
1914	9,508	771	2,533	205	26.6	1934	7,536	488	1,418	92	18.8
1915	17,096	1,368	4,216	337	24.7	1935	3,151	202	526	34	16.7
1916	30,507	2,412	7,096	561	23.3	1936	2,757	174	389	25	14.1
1917	18,569	1,451	4,174	326	22.5	1937	2,083	130	311	19	14.9
1918	25,246	1,952	7,354	568	29.1	1938	2,811	173	405	25	14.4
1919	16,986	299	5,573	426	32.8	1939	4,296	260	788	48	18.3
1920	13,253	1,002	3,510	265	26.5	1940	4,416	263	863	51	19.5
1921	4,487	335	1,271	95	28.3	1941	9,414	558	1,751	104	18.6
1922	2,489	184	723	53	29.0	1942	22,054	1,289	4,411	258	20.0
1923	1,925	142	603	44	31.2	1943	40,188	2,304	8,252	473	20.5
1924	1,683	122	588	42	34.9						



TABLE NO. 18. VACCINATION AGAINST TYPHUS 1943

Govts. or Province	No. Inoculated			No. of Cases						Complications
				After 1st Inj.		After 2nd Inj.		After 3rd Inj.		
	Once	Twice	Three times	Cured	Died	Cured	Died	Cured	Died	
Cairo ... ..	574	552	596	—	—	—	—	—	—	—
Alexandria... ..	555	549	518	—	—	—	—	—	—	—
Suez... ..	27	3	58	—	—	—	—	—	4	—
Damietta ... ..	—	—	280	—	—	—	—	—	—	—
Canal ... ..	—	1	166	—	—	—	—	—	—	—
Frontiers Adm. ... ..	17	1474	30	4	—	4	—	4	—	—
Gharbia... ..	7	29	214	2	—	2	—	2	—	—
Dakahlia ... ..	1	5	472	—	—	—	—	—	—	—
Sharbia... ..	2175	2173	3196	6	—	3	—	2	—	—
Bahera... ..	118	111	238	—	—	—	—	—	—	—
Matruh... ..	—	—	830	—	—	—	—	—	—	—
Kalûbia ... ..	29	27	138	—	—	—	—	—	—	—
Giza ... ..	3	3	510	—	—	—	—	—	—	—
Beni-Suef ... ..	28	10	66	—	—	—	—	—	—	—
Fayyum... ..	—	10	28	—	—	10	—	—	—	—
Maria ... ..	217	217	217	—	—	—	—	—	—	—
Assiut ... ..	559	519	389	—	—	—	—	—	—	—
Girga ... ..	10	23	189	—	—	—	—	—	—	—
Qana... ..	17	11	32	—	—	—	—	—	—	—
Aswan ... ..	13	13	19	—	—	—	—	—	—	—
TOTAL ... ..	4353	3759	8126	12	—	19	—	8	4	—

TABLE No. 19.—SHOWING NO. VACCINATED AGAINST PLAGUE IN 1943

Governorate or Province	Cases	Deaths	No. Vaccinated	No. of Cases			No. of Contacts Observed	No. of rats trapped	
				Before	After	Sort		Alive	Dead
Cairo ... ..	—	—	—	—	—	—	—	48,506	—
Alexandria... ..	—	—	—	—	—	—	—	197	—
Damietta ... ..	—	—	—	—	—	—	—	—	—
Canal ... ..	7	4	4,738	—	—	—	4,738	322	—
Suez ... ..	156	106	46,247	—	1	—	46,247	—	—
Frontiers Adm....	—	—	598	—	—	—	598	588	—
Gharbia ... ..	—	—	—	—	—	—	—	8,523	35
Dakahlia ... ..	—	—	—	—	—	—	—	—	—
Sharkia ... ..	—	—	95	—	—	—	95	—	—
Behera... ..	—	—	—	—	—	—	—	250	1,081
Menoufia ... ..	—	—	—	—	—	—	—	—	—
Kaliubia ... ..	—	—	—	—	—	—	—	16,407	3,968
Giza ... ..	—	—	—	—	—	—	—	1,637	—
Beni-Suef ... ..	—	—	116	—	—	—	116	67	—
Fayoum ... ..	—	—	—	—	—	—	—	—	—
Minia ... ..	—	—	—	—	—	—	—	—	178
Assiut ... ..	—	—	—	—	—	—	—	22,977	—
Girga ... ..	—	—	1,276	—	—	—	1,276	6,506	—
Qena ... ..	—	1	388	—	—	—	388	—	—
Aswan ... ..	—	—	—	—	—	—	—	—	—
<b>TOTAL ... ..</b>	<b>163</b>	<b>111</b>	<b>53,334</b>	<b>—</b>	<b>1</b>	<b>—</b>	<b>53,334</b>	<b>105,998</b>	<b>5,262</b>

TABLE No. 20.—INOCULATION AGAINST TYPHOID IN 1943

Governorate or Province	No. Inoculated Twice			Remarks
	By Health Offices	By Private Practitioners	Total	
Cairo ... ..	76,102	—	76,102	
Alexandria ... ..	137,381	—	137,381	
Suez ... ..	1,200	263	1,463	
Damietta ... ..	—	—	—	
Canal ... ..	1,990	113	2,103	
Frontiers Adm....	2,613	410	3,023	
Gharbia ... ..	4,115	207	4,322	
Dakahlia ... ..	1,737	219	1,956	
Sharkia ... ..	1,102	—	1,102	
Behera... ..	2,889	—	2,889	
Menoufia ... ..	1,062	564	1,626	
Kaliubia ... ..	1,429	—	1,429	
Giza ... ..	2,277	—	2,277	
Beni-Suef ... ..	714	47	761	
Fayoum ... ..	665	—	665	
Minia ... ..	2,666	—	2,666	
Assiut ... ..	2,880	65	2,945	
Girga ... ..	1,423	—	1,423	
Qena ... ..	1,287	64	1,351	
Aswan ... ..	383	—	383	
<b>TOTAL ... ..</b>	<b>243,915</b>	<b>1,952</b>	<b>245,867</b>	



TABLE No. 21.—GOVERNORATES AND PROVINCES VACCINATED AGAINST SMALL-POX IN 1943

Governorate or Province	Population in 1937	Beginning of Vaccination	End of Vaccination	No. Vaccinated
Cairo ... ..	1,312,096	January 1943	November 1943	1,815,088
Suez ... ..	49,686	January 1943	May 1943	102,036
Gharbia ... ..	1,967,894	April 1943	October 1943	2,220,542
Dakahlia ... ..	1,218,502	August 1942	April 1943	1,336,856
Behera... ..	1,061,596	July 1942	May 1943	1,178,780
Menoufia ... ..	1,159,701	July 1942	February 1943	1,192,877
Giza ... ..	635,331	September 1942	September 1943	702,175
Beni-Suef ... ..	561,312	June 1943	October 1943	590,586
Minia ... ..	928,259	August 1941	July 1943	939,842
Assiut... ..	1,207,321	April 1943	October 1943	1,200,447
Girga ... ..	1,118,102	January 1941	August 1943	1,154,539
Qena ... ..	1,017,569	September 1943	November 1943	967,147
Aswan ... ..	305,096	March 1943	November 1943	241,476
Sinai ... ..	18,011	November 1942	February 1943	21,928
Southern Desert ... ..	29,109	September 1942	December 1943	28,092
Western Desert ... ..	52,576	December 1942	December 1943	22,953
Red Sea Dist. ... ..	9,914	February 1943	May 1943	6,447
<b>TOTAL ... ..</b>	<b>12,700,375</b>	<b>—</b>	<b>—</b>	<b>13,721,811</b>

TABLE No. 22.—INOCULATION AGAINST DIPHTHERIA BY ANATOXIN IN 1943

Governorate or Province	No. inoculated three times	No. of cases observed after the 3rd inoculation	Complications
Cairo ... ..	39,626	118	Some local inflam. and slight rise in temp.
Alexandria ... ..	18,532	62	
Suez... ..	1,553	—	
Damietta ... ..	1,519	—	
Canal ... ..	2,381	—	
Frontiers Adm. ... ..	372	—	
Gharbia ... ..	5,528	—	
Dakahlia... ..	3,344	7	
Sharkia ... ..	3,312	3	
Behera ... ..	1,993	—	
Menoufia... ..	3,330	—	
Kaliubia... ..	1,961	—	
Giza... ..	3,094	—	
Beni-Suef ... ..	10,046	—	
Fayoum ... ..	3,434	—	
Minia ... ..	2,625	—	
Assiut ... ..	2,631	—	
Girga ... ..	2,083	—	
Qena ... ..	2,260	—	
Aswan ... ..	1,373	—	
<b>TOTAL ... ..</b>	<b>110,397</b>	<b>190</b>	

TABLE No. 23.—BLOOD SAMPLES TAKEN IN 1943 FOR WEIL FELIX REACTION

Governorate or Province	No. of Samples sent to Labs.			No. Positive			No. Negative			No. Spoiled		
	From Alive	From Dead	Total	From Alive	From Dead	Total	From Alive	From Dead	Total	From Alive	From Dead	Total
Cairo ...	271	109	380	67	49	116	204	43	247	—	17	17
Alexandria	2,871	—	2,871	474	—	474	1,497	—	1,497	—	—	—
Suez... ..	2,06	183	2,243	659	139	798	1,390	37	1,427	11	7	18
Damietta...	—	—	—	—	—	—	—	—	—	—	—	—
Canal ...	1,086	—	1,086	482	—	482	604	—	604	—	—	—
Fr. Adm.	433	1	434	159	—	159	217	3	220	55	—	55
Gharbia ...	4,410	1,931	6,341	2,120	254	2,374	1,885	1,358	3,243	318	363	681
Dakhlia...	2,510	2,183	4,723	955	285	1,220	1,841	1,73	2,614	318	412	730
Sharkia ...	1,36	782	918	800	383	1,283	247	370	617	47	193	240
Behara ...	3,02	687	3,699	1,192	61	1,253	1,050	383	2,033	160	210	370
Matoufia...	2,09	1,510	3,600	2,318	211	2,529	601	952	1,553	147	300	447
Kaliubia ...	2,70	372	3,072	1,380	80	1,460	1,130	180	1,310	216	93	309
Giza ...	136	365	499	50	65	115	85	217	300	3	84	87
Bah-Suef..	525	310	835	140	34	174	347	215	562	40	59	99
Fayoum ..	420	291	711	214	2	216	172	210	382	24	59	83
Minia ...	221	1	222	2	—	2	27	8	35	33	3	36
Assiut ...	917	17	934	199	15	214	579	61	640	98	24	122
Guga ...	1,13	183	1,313	217	15	232	1,001	130	1,131	31	36	67
Qena ...	1,16	—	1,160	521	—	521	79	1	80	46	—	46
Aswan ...	992	22	1,014	382	7	389	332	8	340	187	7	194
<b>TOTAL ...</b>	<b>29,683</b>	<b>9,138</b>	<b>38,821</b>	<b>12,426</b>	<b>1,701</b>	<b>14,127</b>	<b>14,440</b>	<b>5,444</b>	<b>19,886</b>	<b>1,734</b>	<b>1,867</b>	<b>3,601</b>

TABLE No. 24.—STATISTICS OF FEVER HOSPITALS IN 1943

Fever Hospital at	Admitted			Cured			Improved			Died		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Alexandria...	11,259	2,004	13,263	9,457	1,512	10,969	1,053	223	1,276	590	256	846
Abbassia ...	15,634	7,617	23,251	13,461	6,700	20,161	—	—	—	2,141	838	2,979
Port-Said ...	1,403	324	1,727	1,158	276	1,434	160	7	167	67	37	104
Suez ... ..	1,007	229	1,236	844	185	1,029	165	7	172	90	31	121
Damietta ...	303	171	474	261	145	406	—	—	—	42	22	64
Damanhour	1,167	85	1,252	1,019	735	1,754	—	—	—	134	131	265
Marsa Matruh	1,404	1,271	2,675	1,274	1,200	2,474	—	—	—	156	97	253
Mit Ghamr...	770	82	852	680	761	1,441	—	—	—	96	85	181
Tanta ... ..	1,970	2,306	4,276	1,770	2,072	3,842	—	—	—	101	180	284
Zifta ... ..	700	918	1,618	680	847	1,527	—	—	—	81	74	155
Fakous ... ..	500	389	889	449	357	806	—	—	—	50	36	86
Shebin El Kom	1,313	1,197	2,510	1,080	998	2,078	23	31	54	175	153	328
Zagazig ... ..	2,600	1,791	4,391	2,374	1,578	3,952	37	33	70	200	204	404
Beni Suef ...	1,130	778	1,908	911	687	1,598	68	20	88	146	69	215
Minia ... ..	772	350	1,122	693	310	1,003	—	—	—	69	24	93
Assiut ... ..	1,144	444	1,588	1,003	393	1,396	17	4	21	125	46	171
Sahag ... ..	918	360	1,278	824	330	1,154	—	3	3	83	27	110
Qena ... ..	461	112	573	423	88	511	—	—	—	42	22	64
Luxor ... ..	633	264	897	588	237	825	—	—	—	54	21	75
<b>TOTAL ...</b>	<b>45,160</b>	<b>22,300</b>	<b>67,460</b>	<b>38,987</b>	<b>19,439</b>	<b>58,426</b>	<b>1,523</b>	<b>328</b>	<b>1,851</b>	<b>4,445</b>	<b>2,353</b>	<b>6,798</b>

No. of Hospitals 20 — Fever Hospital, Alexandria, included.  
 No. of V. Shelters 15.  
 No. of Cordons 28.



# MECDO LEGAL

The number of medico legal cases examined by the medical officers of health during the year amounted to 40,205 accidental and 79,112 criminal cases. These are distributed according to locality in the following table No. 25

TABLE No. 25:—SHOWING DISTRIBUTION OF MEDICO LEGAL CASES DURING 1943

Provinces	Slight Cases		Serious Cases		Fatal Cases		Total		Remarks
	Accidental	Criminal	Accidental	Criminal	Accidental	Criminal	Accidental	Criminal	
Behera ... ..	1,121	2,944	274	166	222	117	1,617	3,227	
Gharbia ... ..	2,574	8,123	378	488	501	259	3,454	8,863	
Menoufia... ..	982	2,517	308	482	225	183	1,510	3,182	
Sharkia ... ..	1,089	1,753	458	168	258	121	1,798	2,042	
Dakahlia ... ..	1,336	5,085	346	629	448	334	2,130	6,048	
Kaliubia ... ..	347	730	110	214	133	93	590	1,037	
Giza ... ..	637	1,285	64	60	144	74	845	1,425	
Fayoum ... ..	398	1,279	203	293	99	108	698	1,680	
Beni Suef ... ..	454	2,597	183	233	146	57	783	2,887	
Minia ... ..	630	2,714	210	233	145	187	985	3,134	
Assiut ... ..	1,324	3,678	196	302	236	226	1,756	4,206	
Gerga ... ..	831	3,376	279	504	299	160	1,409	4,040	
Qena ... ..	523	2,371	93	147	172	93	788	2,611	
Aswan ... ..	175	149	10	19	30	4	215	172	
Canal ... ..	4,875	588	2,965	213	240	58	8,080	859	
Suez... ..	231	1,249	45	11	57	19	333	1,279	
Damietta ... ..	171	840	6	3	36	8	215	851	
Cairo Police ... ..	1,682	29,974	85	168	1	—	1,768	30,142	
Alex. Police ... ..	3,666	812	6,119	99	—	—	9,785	911	
Frontiers... ..	820	370	500	99	126	47	1,446	516	
TOTAL ... ..	23,661	72,434	12,825	4,537	3,519	2,141	40,205	79,112	



## Chapter III.—INDUSTRIAL HYGIENE

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### UNHEALTHY, INCONVENIENT & DANGEROUS ESTABLISHMENTS

#### I.—*Applications for new permits.*

The number of applications for new permits for Unhealthy Establishments of the first class during this year was 216 as compared with 312 in the previous year.

The number of applications for new permits for general and cattle markets was 4 as compared with 9 in 1942.

Applications for new permits for Establishments in : Dakahlia, Gharbia, Behera, Menoufia and Damietta Governorate are not included. These are being dealt with by the special Committee convened in the Labour Department for facilitating the procedure of issuing permits.

#### II.—*Licensed Establishments actually working.*

The total number of Unhealthy Establishments of the three classes licensed and actually working in Provinces and Governorates (excluding establishments in Alexandria) was 74107 in 1943.

#### III.—*Ministerial Arrêtés.*

In accordance with the ruling given by the Contentieux regarding issue of Ministeria Arrêtés providing for the improvement of sanitary conditions of establishments, 27 Ministerial arrêtés were issued during this year as against 14 in the previous year.

#### IV.—*Modification of the Schedule.*

As provided by Article 2 of Law No. 13 of 1904, the schedule was revised with a view to modifying the space which should be left between certain unhealthy establishments and habitations because of the nuisance caused by the presence of mechanical and electrical motors or by the particular industry.

A Departmental order No. 5 was issued on January 2, 1943, specifying the new space for such establishments.

## Chapter IV.—FOOD CONTROL

STATISTICS SHOWING WORK DONE BY FOOD CONTROL GANGS IN CUSTOMS HOUSES DURING 1943

TABLE No. 26

*A.— Consignments examined and Results of Samples taken therefrom*

No. of Consignments examined	No. of Samples Taken	Results of Analysis		
		Genuine	Unfit	Adulterated
9154	478	234	141	103

TABLE No. 27.—*Foodstuffs condemned or refused admission into the Country*

Food	Kilos	Cans or Bottles	Boxes	Sacks	Baskets	Units	Barrels or tins
Vegetables ... ..	18,605	1	—	—	—	—	—
Fruits ... ..	403,955	—	—	—	225	24	—
Meat ... ..	11,420	—	—	—	—	—	—
Jams and Dried Fruits ... ..	65,128	1,804	—	—	—	—	—
Milk and its Products... ..	1,937	2,679	60	—	—	—	—
Meat ... ..	625	75	11	—	—	—	—
Vegetables and sauce ... ..	346	766	—	—	—	—	—
Fish ... ..	56,402	103,059	9	—	—	—	2
Olive oil ... ..	11,075	—	—	—	—	—	(tins) 40
Linseed oil ... ..	645	—	—	—	—	—	—
Flour ... ..	618	—	—	600	—	—	—
Flour Products ... ..	4,140	72	—	—	—	—	—
Sweets and chocolate ... ..	1	247	22	—	—	—	—
Sugar ... ..	339	—	—	5	—	—	—
Dutch and Greck cheese ... ..	17	—	—	—	—	—	—
Butter ... ..	4,007	5	—	—	—	—	—
Fat and Margarine ... ..	925	50	—	—	—	—	—
Tea ... ..	80.5	—	3	—	—	—	—
Coffee ... ..	2,358.5	—	—	44	—	—	—
Wine ... ..	441	—	—	—	—	—	—
Beer ... ..	—	7,440	140	—	—	—	—
Seeds and Corn ... ..	160,089	—	—	632	—	—	—
Nuts and Almonds ... ..	2,200	—	—	106	—	—	—
Spices ... ..	71 000	—	—	11	—	—	Banels) 4
Other Foods ... ..	587	1 547	11	—	—	—	—
<b>TOTAL ... ..</b>	<b>822 726</b>	<b>117 745</b>	<b>256</b>	<b>1 398</b>	<b>225</b>	<b>24</b>	<b>46</b>

TABLE No. 28 —SHOWING NO. OF SAMPLES OF MILK TAKEN DURING 1943 AND RESULT OF THEIR ANALYSIS.

No. of samples	Result of Analysis			
	Genuine	Adulterated by removal of fat	Adulterated by addition of water	Adulterated by both
23,190	21,445	777	897	71

TABLE No. 29.—VARIOUS STATISTICS 1943

P.V. drawn up under article II of Law No. 48 of 1941	No. of P.V. drawn up against Itinerant Vendors	No. of P.V. drawn up against Milk Vendors	Bandars to which the itinerant ven- dors regulation was applied	Bandars to which the milk vendors regulations was applied	No. of itinerant vendors licensed during 1943	No. of milk vendors licensed during 1943
2,166	11,672	3,531	11	4	1,184	647



TABLE No. 30.—SHOWING QUANTITIES OF FOODSTUFFS CONDEMNED, NUMBER OF SAMPLES TAKEN AND RESULTS OF THEIR ANALYSIS DURING 1943.  
(THIS LIST DOES NOT INCLUDE THE FIGURES FOR CAIRO AND ALEXANDRIA GOVERNORATES AND THE FOOD CONTROL GANGS AT THE PORTS).

Name of Article	Foodstuffs Condemned					Samples taken					Percentage	
	Number	Bottles	Cans	Rattle (lb)	Okes	Number of Samples	Genuine	Adulterated	Unfit	Not analysed	Adulteration	Unfitness
											%	%
(a) Fresh Foods:—												
Fruits and Vegetables...	105,478	—	9	12,488	79,235	—	—	—	—	—	—	—
Fish ... ..	311	—	—	1,109	16,867	—	—	—	—	—	—	—
Meat ... ..	37	—	233	727	4,202	—	—	—	—	—	—	—
Other Fresh Foods ... ..	—	—	—	—	—	—	—	—	—	—	—	—
(b) Cooked Foods ... ..												
(c) Canned Foods:—												
Jams ... ..	15	168	438	—	15	4	4	—	—	—	—	—
Milk and its Products...	—	—	89	3	4,316	3	3	—	—	—	—	—
Fruits and Vegetables...	1,302	74	3,900	534	2,991	48	46	2	—	—	—	4.18
Meat ... ..	—	4	260	2,195	2.8	2	2	—	—	—	—	—
Fish ... ..	818	—	7,514	466	163	38	52	—	26	—	—	33.33
Other Canned Foods ... ..	1,197	85	86	176	369	4	4	—	—	—	—	—
(d) Oils:—												
Olive Oil...	—	—	—	2	178	182	168	8	6	—	4.38	3.29
Sesame Oil ... ..	—	—	—	41	9	1,143	1,079	45	19	—	3.06	1.57
Linseed Oil ... ..	—	—	—	164	46	655	575	25	55	—	3.81	8.36
Lettuce Oil ... ..	—	—	—	—	4	65	55	2	8	—	3.07	12.3
Safflower Oil...	—	—	—	—	—	116	58	53	—	—	50	—
Cotton-Seed Oil ... ..	—	—	—	81	36	69	59	5	5	—	7.27	7.27
Other Oils ... ..	—	—	—	3	8	103	98	5	—	—	4.85	—





## Part II.—SOCIAL HYGIENE

### Chapter V.—MATERNITY AND CHILD WELFARE

Maternity and child welfare services are now made available to all classes of the population, irrespective of their social status.

19 maternity and child welfare centres which had hitherto been under the Provincial Councils' supervision, have now been attached to this Ministry, under Law No. 46 of 1942. These are :

1. Child welfare centre at Toukh together with Dayas school attached thereto.
2.       "       "       Kaliub,       "       "       "       "
3.       "       "       Shebin el Kanater, together with Dayas school attached thereto.
4.       "       "       Zagazig, together with Dayas school attached thereto.
5. Abu-Kebir centre.
6. Mina el Kamh centre.
7. Belbeis centre.
8. Santa centre.
9. Biala centre.
10. Shebin el Kom centre.
11. Ashmoun centre.
12. Tala centre.
13. Minshat Sabry centre.
14. Embaba centre.
15. Wasta centre.
16. Beba centre.
17. Manfalout centre.
18. Sohag centre and Dayas School attached thereto.
19. Damanhour centre and Dayas School attached thereto.

In addition, the Kafr el Zayat Municipality Child Welfare Centre has also been handed over to this Ministry.

Two posts of a Medical Officer and a Pharmacist were provided in the establishment of Travelling Welfare Centres Nos. 4 and 5 at Helwan and Gerga respectively.

The mobile welfare centres in the following towns were converted into permanent centres:

Zifta.  
Edfou.  
Abu-Tig.  
Helwan.  
Gerga.  
Dessouk.  
Beni-Mazar.

This step was taken in the interest of both the public and the centres.

A ten-bed in-patient department was created in the Children's Orphanage at Sayeda Zenab, Cairo, for the treatment of slight ailments among resident foundlings and stray children.



In pursuance of the principle of raising the technical standard of medical officers, five medical officers were sent to the Faculty of Medicine on a post graduate course in Pediatrics.

Ten schools for graduating Assistant Midwives and Health Visitors were inaugurated at the following localities :

Assiut.
Beni-Suef.
Tanta.
Zagazig.
Bab el Shaaria (Cairo).
Boulac                    ,,
Old Cairo               ,,
Shoubra                 ,,
Zeitoun                 ,,
Sharabia                ,,

160 girl students joined these schools which will provide welfare centres and rural health groups with the required personnel.

It has been decided to issue milk gratis daily to poor mothers, children and pregnant attending the centres.

Concentrated Vitamin D was distributed to rachitic children and those susceptible to attack with rickets.

Child Welfare units throughout the country celebrated the anniversaries of the accession of H.M. the King to the Throne of Egypt, and the birthday of H.R.H. Princess Ferial. On these occasions, prizes were awarded to infants for good health and cleanliness. Advantage was also taken of these events to distribute monetary presents, foodstuffs and shoes to poor mothers and children attending the centres. Moreover, a theatrical performance was held at the Royal Opera House, at Cairo, which was attended by H.M. the King's Delegate.

*Statement of the Section's activities during 1943.*

Pregnants (old cases) ... ..	337,142
Pregnants (new cases) ... ..	84,348
Blood specimens for Wassermann test ... ..	72,060
Positive to Wassermann reaction ... ..	4,346
Children attendance ... ..	1,176,673
Circumcision operations ... ..	694
Infants vaccinated against small pox ... ..	14,667
Inoculation against diphtheria ... ..	8,418
Labours by midwives at centres ... ..	15,009
Labours by Asst. Midwives ... ..	63,486
Labours by Medical Officers ... ..	458
Labours from outside (not registered) ... ..	6,629
Cases attended throughout puerperium - ... ..	2,614
Cases of confinement sent to hospitals ... ..	1,403
Total number of cases of confinement ... ..	78,953
Still births at full term ... ..	1,293
Premature births (during first three months) ... ..	199
Premature births (after the sixth month) ... ..	241
Maternal mortality due to confinement... ..	20



Infantile deaths in the first month of life	...	...	...	...	...	...	...	522
Medical Officer visits to sick puerperals	...	...	...	...	...	...	...	1,667
Midwives visits to pregnant in the 9th month	...	...	...	...	...	...	...	355, (50
Midwives visits to puerperal mothers	...	...	...	...	...	...	...	36,580
Other visits	...	...	...	...	...	...	...	16,506
Visits to pregnant's homes	...	...	...	...	...	...	...	16,159
„ children's homes	...	...	...	...	...	...	...	47,043
Cases of Eclampsia	...	...	...	...	...	...	...	54
Laceration of perineum	...	...	...	...	...	...	...	441
Cases of placenta previa	...	...	...	...	...	...	...	16
„ puerperal sepsis	...	...	...	...	...	...	...	2
Urine samples	...	...	...	...	...	...	...	296,297
Antenatal albuminuria	...	...	...	...	...	...	...	4,926
„ diabetes	...	...	...	...	...	...	...	58
Lectures given by Medical Officers	...	...	...	...	...	...	...	4,312
Lectures given by Midwives	...	...	...	...	...	...	...	8,209
Lectures given by Asst. Midwives	...	...	...	...	...	...	...	7,144
Contribution to mothers and children (milk foods)	...	...	...	...	...	...	...	29,460
„ „ „ (clothing)	...	...	...	...	...	...	...	4,420
„ „ „ (cloth)	...	...	...	...	...	...	...	9,645m.

## Chapter VI.—CHEST DISEASES

### *Distribution of Tuberculosis in Egypt.*

Egypt first launched its campaign against tuberculosis in 1928 when tuberculosis was added to the Schedule of Notifiable Infectious diseases. Since then, chest diseases dispensaries have been established for the examination of patients and their instruction in prophylactic measures and general hygiene by competent staff. The first of these dispensaries was created in Cairo in 1929 and during that year 634 positive tuberculous cases were discovered. With the creation of new dispensaries, more positive cases were discovered until, by the end of 1943, fifteen dispensaries were in service and no less than 48016 tuberculous cases on record.

The following is a detailed summary of the incidence and mortality of tuberculosis in recent years.

TABLE No. 31

Year	No. of Dispensaries	New patients examined	No. of Tuberculous pts. discovered	Mortality
1929	2	5,787	1,007	—
1930	3	7,750	529	—
1931	3	22,014	1,707	—
1932	3	20,519	838	103
1933	4	24,664	1,246	167
1934	4	33,461	1,563	203
1935	5	42,282	2,388	241
1936	6	56,994	2,855	724
1937	8	65,053	3,546	596
1938	12	96,957	4,320	871
1939	13	113,296	4,933	1,026
1940	14	121,177	5,361	1,225
1941	14	101,957	5,598	1,362
1942	15	97,367	5,986	1,450
1943	15	100,551	6,139	1,387
<b>TOTAL</b>	—	<b>909,829</b>	<b>48,016</b>	<b>9,355</b>

These figures show clearly the ever increasing number of patients who avail themselves of the services of these dispensaries.

The following tables show the number of patients examined, cases diagnosed, and occupational and geographical distribution of tuberculosis in 1943.

306 TRADESMEN, (50/o) consisting of	87 food sellers. 31 cattle & poultry merchants. 72 grocers. 24 fruiterers. 92 other trades.
420 EMPLOYEES, (70/o) consisting of	199 Civil servants. 109 commercial employees. 31 teachers. 81 other employees.
1973 WORKERS (320/o) consisting of	52 Cooks, 40 Sufragis, 71 barmen, 50 Domestic servants, 50 farrashes, 24 gate-keepers, 72 barbers, 47 laundry-men, 89 drivers, 125 tailors, 93 shoe-makers, 109 carpenters, 76 painters, 121 building workmen, 163 company employees, 135 weavers, 188 mechanics, 51 printers, & 417 other jobs.
1107 FARMERS (180/o)	
170 Students (30/o)	
2163 UNEMPLOYED (350/o) of whom	1597 Unable to work. 223 children. 343 unemployed.

#### *Activities of Chest Diseases Units.*

The Ministry is going ahead with its programme of providing more preventoria, dispensaries and in-patient departments; contacts are, as usual, carefully looked after; patients whose professions bring them in contact with the public are strictly supervised and the incapacitated are provided with funds. In short, the Ministry is sparing no effort in the constructive, social and therapeutic fields.

### CONSTRUCTIVE WORK

#### *A.—Dispensaries.*

Fifteen dispensaries are so far in existence. Of these 3 are in Cairo, 8 in Lower Egypt, and 4 in Upper Egypt. These dispensaries are specially equipped for diagnosis and treatment. A chest diseases specialist is in charge of each dispensary assisted by one or two health visitors. There are besides three branch dispensaries at Menouf, Samalout & Luxor in connection with Shebin el Kom, Minia and Kena dispensaries respectively. Treatment in these branches is given once or twice weekly.

#### *B.—Sanatoria.*

There are two sanatoria at Helwan and Abbassia each with an accommodation of 500 beds. Moreover in-patient departments have been provided in Zagazig, Marsoura, Damietta, Tanta and Fayoum dispensaries and two more are in the course of construction at Port-Said and Damanhour. Each of these in-patient departments has an accommodation of twenty beds except Damietta which has thirty five beds and Marsoura which has twenty five beds. It is the intention of the Ministry to provide the remaining dispensaries with in-patient sections since these have proved very useful and essential to the patients living in the neighbourhood.



C.—*Institutions for Bone Tuberculosis* :—

There are two of these institutions, one in Alexandria with an accommodation of 80 beds and the other, with 50 beds was attached to Abbassia Chest Diseases Hospital, but is now accommodated in No. 19 Yousif Pasha Street, Helwan, which was kindly donated by H.H. Princess Khadiga Abbas Halim for use as a hospital or sanatorium, with special privileges for the inhabitants of Helwan. It has an accommodation of 120 beds of which 110 are reserved for free treatment, 2 paying beds at P.T. 40 per day each and eight paying beds at P.T. 20 per day each. As a token of gratitude to H.H. Princess Khadiga Abbas Halim in appreciation of her generous gift, this institution has been named after her.

D.—*Settlement for Convalescents* :—

Many a convalescent requires further treatment and care after discharge from the sanatoria, otherwise there is great danger of a recurrence of the disease through poor diet or exhaustive work.

It was proposed to provide a settlement for such convalescents where they can live with their families under medical supervision and care and pursue their particular occupations in the various workshops set up therein. Similar settlements provided in Papworth and Preston Hall, proved a great success; and it is hoped the time will not be far off when this settlement becomes self supporting.

The Air Raid refugee camp at Merg has been requisitioned for the purpose and is now known as the Merg settlement for T.B. convalescents. Convalescents with their families began to arrive in November 1943 and 15 convalescents are actually in residence with their families.

Owing to lack of funds, the Anti Tuberculosis Society was requested to contribute a sum of L.E. 500 towards providing the workshops in the settlement with their requirement of raw material.

*Social and Preventive Measures.*—No anti-tuberculosis scheme is complete without consideration being given to social and preventive measures. With this object in view, no effort is spared by the Ministry to provide the patients, their children and contacts with facilities to lead a comfortable life. The following are the measures taken to attain this end.

(1) *Preventoria.*—There are four of these in Zeitoun, Marg, Mahalla el Kubra and Assiut. They are intended to accommodate children of tuberculous parents with a view to their protection against infection by eliminating them from the source of infection and providing them with good nutrition.

Treatment by ultra violet radiation was tried this year in Alexandria preventorium. During summer children from Cairo Preventorium were sent in batches to Alexandria where they enjoyed the sea-side sun and air. The result was satisfactory and it is proposed to extend this privilege to children of all other preventoria by giving them the chance of spending the summer months in Alexandria. Travelling expenses will be borne by the treasury.

(2) *Contacts.*—Are persuaded to attend the dispensaries regularly for examination and instruction in methods of protection. The following are details of contacts who attended the dispensaries during 1942 and 1943 and those who developed the disease.

Table No. 32.

Year	Contacts			No. of Contacts Who Developed Tuberculosis
	Children	Adults	Total	
1942	3234	4166	7400	322
1943	3275	3962	7237	245

(3) *Persons who come in contact with the public by reason of their occupations.*—The Itinerant Vendor Law No. 73 of 1943 was published during the year. This provides that persons engaged in the preparation or sale of foodstuffs will not be authorised to pursue their occupations unless they are pronounced free from infectious diseases, tuberculosis included. Tuberculous persons will be catered for by the dispensaries.



(4) *Donations.*—Funds are placed at the disposal of the dispensaries in aid of destitute patients. The sum of L.E. 5,000 was provided in the budget for this purpose. Annual contributions by Provincial Councils have been increased to L.E. 350 each. This increase, however, was inadequate to meet the needs of all the patients. One thousand families have been fitted by this scheme to the extent of L.E. 9874,364 mills. The Ministry of Social Affairs contributed L.E. 660 at the rate of L.E. 20 per patient. Some patients received a lump sum to start business. Others had it in instalments. The public, the charitable institutions and firms also made contributions to these patients.

(5) *Employment of able ex-patients.*—Whenever possible, suitable work is offered to patients on discharge from the chest diseases units or to their relatives in order to afford them a means of living and thus eliminate the danger of relapse should they have to undertake hard work.

(6) *Students*.—Police and constable cadets as well as university and other students are given preferential treatment by the sanatoria. They are accepted in the special 3rd. class at half treatment fees and are given priority in admission so that they do not become a source of infection to their schoolmates.

## THERAPEUTIC MEASURES

(1) *Dispensaries.*—There were 15 dispensaries in service which examined a total of 100,551 persons during the year. Of this number 6,139 were returned positive for tuberculosis. Of these 235 or 4 per cent were children and the remaining 5,904 or 96 per cent were adults.

Some 22,514 visits were paid to patients in their homes by nurses and 5, 552 visits were paid by medical officers.

Herebelow are details of the various treatments given by dispensaries during the year.

A.—*Domiciliary Treatment*.—The following Table No. 33, shows the results of domiciliary treatment (cases requiring special treatments e.g. A.P., gold, etc., or residents in Sanatoria are not included).

TABLE No. 33

										Total of patients 1943
No. of positive cases ... ..										6683
Condition of patient on first examination at dispensary ... ..	Sputum ... ..			}	Positive ... ..			5119		
					Negative ... ..			1564		
	Lesion ... ..			}	Unilateral ... ..			2569		
					Bilateral ... ..			4114		
Cavitary ... ..					2578					
Last sputum ...			}	positive ... ..			4554			
				Negative ... ..			2129			
Result of treatment ... ..	Gain in weight ... ..						1870			
	Loss of weight ... ..						1646			
	Stationary ... ..						1810			
	Dead ... ..						1357			
Ability to work after treatment ... ..	Unable to work ... ..						1395			
	Unable to walk ... ..						1875			
	Undertaking light jobs ... ..						1158			
	Resuming complete work ... ..						398			
	Dead ... ..						1357			

B.—*Artificial Pneumothorax Therapy*: Below is given the number of patients who received A.P. treatment and the results obtained during 1943.

												Total No of patients who visited the dispensary in 1943
No. of patients treated by A.P.	...	...	...	...	...	...	...	...	...	...	...	1769
No. of inductions	...	...	...	...	...	...	...	...	...	...	...	360
No. of Refills	...	...	...	...	...	...	...	...	...	...	...	21974
Condition prior to treatment:→												
Sputum	{	Positive	...	...	...	...	...	...	...	...	...	1438
		Negative	...	...	...	...	...	...	...	...	...	331
Extent of Lesion	{	Unilateral	...	...	...	...	...	...	...	...	...	1498
		Bilateral	...	...	...	...	...	...	...	...	...	333
												(of which 1172 cavitary)
No. of cases with haemoptysis	...	...	...	...	...	...	...	...	...	...	...	274
Unilateral collapse	...	...	...	...	...	...	...	...	...	...	...	1653
Bilateral collapse	...	...	...	...	...	...	...	...	...	...	...	115
Extrapleural	...	...	...	...	...	...	...	...	...	...	...	5
Continued refills	...	...	...	...	...	...	...	...	...	...	...	1347

Refills ceased on account of:—

Adhesions	...	...	...	...	...	...	...	...	...	...	...	207
Spread to the contralateral side	...	...	...	...	...	...	...	...	...	...	...	136
Pleural effusions	...	...	...	...	...	...	...	...	...	...	...	177

Result of treatment:— ...

Sputum still positive	...	...	...	...	...	...	...	...	...	...	...	883
Sputum still negative	...	...	...	...	...	...	...	...	...	...	...	282
Sputum became negative	...	...	...	...	...	...	...	...	...	...	...	524
Sputum became positive	...	...	...	...	...	...	...	...	...	...	...	80
Gain in weight	...	...	...	...	...	...	...	...	...	...	...	1016
Loss of weight	...	...	...	...	...	...	...	...	...	...	...	318
Stationary	...	...	...	...	...	...	...	...	...	...	...	307
Dead	...	...	...	...	...	...	...	...	...	...	...	128
Ability to Work after treatment	{	Unable to work	...	...	...	...	...	...	...	...	...	295
		Able to walk	...	...	...	...	...	...	...	...	...	578
		Able to undertake light work	...	...	...	...	...	...	...	...	...	570
		Capable of doing full work	...	...	...	...	...	...	...	...	...	198

## II.—*Sanatoria & Dispensary In-Patient Sections*:—

To meet the ever increasing number of patients, a 50-bed ward was created in Helwan Sanatorium. This is reserved for advanced cases on Sanatoria waiting lists and is known as Ward No. 10. At the same time the orthopedic section, which had been vacated in Abbassia hospital, was occupied in May 1943 by children suffering from pulmonary tuberculosis formerly accommodated in Helwan sanatorium.

The following tables give information regarding patients who were admitted to Helwan Sanatorium, Abbassia Chest Diseases Hospital, and to the in-patient departments of Mansourah, Zagazig, Damietta, Tanta, Fayoum and Assiut Dispensaries.



Table No. 34

	Mansura	Zagazig	Damietta	Fayoum	Tanta	Assiut	Helwan	Abbassia
No. of Pts. present on January 1, 1943	20	18	32	19	20	—	444	480
No. of admissions during the year ...	75	59	109	34	52	51	1,107	897
No. of discharges during the year...	68	58	100	34	55	36	1,071	846
Sputum ... .. { Positive ... ..	44	45	79	31	42	30	751	432
{ Negative ... ..	24	13	21	3	13	6	320	414
Extent of lesion { Unilateral ... ..	49	38	94	18	46	29	491	59
{ Bilateral ... ..	19	20	6	16	8	7	569	256
{ Cavitory ... ..	27	45	55	14	29	21	489	285
Temperature ... { Settled ... ..	20	50	60	11	12	11	629	443
{ Unsettled ... ..	48	8	40	23	42	25	442	403
<i>Treatment prescribed:</i>								
General Treatment ... ..	41	5	100	15	26	9	510	846
Graduated exercises ... ..	27	2	48	15	—	27	632	253
Gold Therapy { No. of patients ...	1	—	—	6	—	—	24	25
{ No. of injections ...	12	—	—	64	—	—	276	223
Tuberculin { No. of patients ...	—	—	—	—	—	—	7	2
Treatment... { No. of injections ...	—	—	—	—	—	—	41	43
<i>Artificial pneumothorax:</i>								
Inductions ... ..	15	49	69	17	27	12	408	479
Refills ... ..	416	1,530	69	343	1	132	6,070	6,070
Extrapleural pneumolysis ... ..	—	—	—	—	—	—	—	1
Phrenic Evulsion or Crush ... ..	—	—	—	—	—	—	109	116
Pleurotomy ... ..	—	—	—	—	—	—	4	—
Aspirations ... ..	3	6	—	—	—	11	42	203
Thoracoplasty ... ..	—	1	2	1	—	—	—	72
Adhesiectomy ... ..	—	8	16	1	—	—	196	171
Complications ... ..	8	3	5	—	6	6	1,044	18
No. of other injections ... ..	—	200	—	316	—	280	1,612	7,051
<i>Causes of discharge:</i>								
At their own { Taken leave but	1	6	—	—	—	1	32	23
request ... .. { have not returned	16	7	8	5	12	4	333	299
{ Refused treatment	17	25	1	11	9	28	122	5
With the consent of attending physician	34	20	90	18	32	3	402	400
Weight ... .. { Increased ... ..	50	30	80	22	30	21	692	445
{ Decreased ... ..	8	10	9	8	7	12	230	133
{ Stationary ... ..	4	10	10	4	16	3	81	248
Temperature ... { Settled ... ..	55	50	77	16	34	25	732	594
{ Unsettled ... ..	13	6	22	18	19	11	210	232
Sputum ... .. { Still positive... ..	23	12	60	28	24	23	611	307
{ „ negative ... ..	19	8	24	2	12	6	280	213
{ Became „ ... ..	23	21	15	4	1	7	180	240
{ „ positive ... ..	3	5	—	—	17	—	32	26
Successful AP. ... ..	18	47	40	16	22	7	388	—
Unsuccessful A.P. ... ..	4	2	47	1	6	5	61	91
Improved cases ... ..	52	30	77	20	36	27	631	309
Cases became worse ... ..	8	11	8	6	3	6	102	86
Stationary cases ... ..	8	15	14	8	14	3	180	174
Dead ... ..	—	2	1	—	1	—	30	79
<i>Ability to Work:</i>								
Able to work ... { Fully ... ..	2	2	28	1	12	10	26	1
{ Partially ... ..	20	33	25	16	22	18	600	419
{ Unable to work ...	46	21	41	17	19	8	320	347
The average stay in days ... ..	140	115	89	169	132	108	122	111
Patients spent more than 6 months	16	19	12	17	17	5	422	328
Patients stayed less than 6 months	52	39	88	17	37	31	621	498

### III. Orthopaedic Institutions ;—

Princess Kadiga Abbas Halim Orthopaedic Hospital, Helwan, was inaugurated on 22.4 1943. It is reserved for patients from Cairo and Upper Egypt while the Maritime Sanatorium Alexandria, is kept for patients from Lower Egypt. Table No. 42 gives the number of patients treated at these two orthopaedic institutions.

TABLE No. 35.—NUMBER OF POSITIVE T.B. CASES NOTIFIED BY THE DISPENSARIES DURING THE YEAR 1943 ACCORDING TO RESIDENCE

Unit	Cairo	Alexandria	Damietta	Port-Said	Canal, Suez and Ismailia	Behera	Gharbia	Menoufia	Dakahlia	Sharkia	Kaliubia	Giza	Beni-Suef	Fayoum	Minia	Assiut	Girga	Qena	Aswan	Cases	Total
Boulac Dispensary	648	—	—	2	5	—	8	18	8	5	49	27	3	—	—	2	2	—	2	—	782
Mobtadayan	47	3	1	—	22	—	8	12	40	12	38	202	12	6	—	4	3	1	4	—	850
Khalifa	222	—	4	—	8	9	18	30	—	39	40	39	—	—	3	4	3	3	—	—	722
Mansoura	—	—	—	—	—	—	117	—	350	8	—	—	—	—	—	1	—	—	—	—	476
Tanta	—	—	—	—	—	3	268	23	3	—	1	1	—	—	—	—	—	—	—	—	299
Damanhour	—	—	—	—	—	278	76	—	—	—	—	—	—	—	—	—	—	—	—	—	354
Zagazig	—	—	—	1	15	—	3	1	32	258	14	—	—	—	—	—	—	—	—	—	324
Mehalla el Kobra	—	—	—	—	—	—	222	—	8	—	—	—	—	—	—	—	—	—	—	—	230
Alexandria	—	183	—	—	—	40	7	—	—	—	—	—	—	—	—	—	—	—	—	3	638
Shebin el Kom	—	—	—	—	—	—	—	154	—	—	—	—	—	—	—	—	—	—	—	—	154
Damietta	—	—	20	89	1	—	69	—	229	2	—	—	—	—	—	—	—	—	—	—	590
Fayoum	—	—	—	—	—	—	—	—	—	—	—	—	34	154	—	—	—	—	—	—	218
Assiut	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	202	26	2	—	—	231
Minia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	174	10	2	—	—	—	186
Qena	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84	1	—	85
TOTAL ... ..	1,649	591	205	92	51	330	796	238	670	324	142	269	49	190	184	223	36	90	7	3	6,139



TABLE NO. 36.—AGE DISTRIBUTION OF DEATHS RECORDED IN CHEST DISEASES  
DISPENSARIES DURING 1943

Dispensary	1-5 Years	5-15 Years	15-25 Years	25-35 Years	35-45 Years	Over 45 Years	Total
Boulac ... ..	—	22	58	101	40	16	237
Mobtadayan ... ..	—	13	37	46	24	9	129
Khalifa ... ..	5	21	104	70	27	22	249
Tanta ... ..	—	6	14	18	8	12	58
Mansoura ... ..	—	1	23	25	18	6	73
Shebin el Kom ... ..	—	2	9	12	8	3	34
Mahalla el Kobra ... ..	1	13	20	19	3	4	60
Zagazig ... ..	—	6	6	5	5	—	22
Damanhour ... ..	4	10	30	15	6	3	68
Alexandria ... ..	1	3	90	49	24	17	184
Damietta ... ..	4	6	40	31	8	4	93
Fayoum ... ..	—	3	21	25	26	7	82
Assiut ... ..	1	2	7	9	8	9	36
Minia ... ..	1	1	19	13	7	4	45
Qena ... ..	—	1	5	4	5	2	17
TOTAL ... ..	17	110	483	442	217	118	1,387

TABLE NO. 37.—MONTHLY ATTENDANCE OF PATIENTS AT THE CHEST DISEASES UNITS  
DURING THE YEAR 1943

Month	Number of Patients	Month	Number of Patients	
January ... ..	8,424	July ... ..	8,352	Total Number 103,551
February ... ..	8,220	August ... ..	8,609	
March ... ..	10,336	September ... ..	6,957	
April ... ..	8,649	October ... ..	7,841	
May ... ..	9,656	November ... ..	7,943	
June ... ..	8,443	December ... ..	7,111	

**TABLE NO. 38.—NUMBER OF NEW PATIENTS ATTENDING CHEST DISEASES UNITS  
DURING THE LAST FIVE YEARS AND NUMBER OF POSITIVE CASES**

Year	Number of new patients	Positive for T.B.	Percentage
1939... ..	113,296	4,933	4.3%
1940... ..	121,177	5,361	4.4%
1941... ..	101,957	5,598	5.4%
1942... ..	97,367	5,986	6.1%
1943... ..	100,551	6,139	6.1%

**TABLE 39.—CHEST DISEASES UNITS SINCE 1929**

Year	Chest Diseases Dispensaries	Branches	In-Patient Departments	Sanatoria	T.B. Bone Sanatoria	Preventoria	Settlement for Conva- lescents
1929 ... ..	2	—	—	—	—	—	—
1930 ... ..	3	—	—	—	—	—	—
1931 ... ..	3	—	—	—	—	—	—
1932 ... ..	3	—	—	—	—	—	—
1933 ... ..	4	—	—	—	—	—	—
1934 ... ..	4	—	—	1 <sup>(1)</sup>	—	—	—
1935 ... ..	5	—	—	1	—	—	—
1936 ... ..	6	—	—	1	1 <sup>(2)</sup>	—	—
1937 ... ..	8	—	—	1	1	—	—
1938 ... ..	12	—	2	2	1	1	—
1939 ... ..	13	—	2	2	1	1	—
1940 ... ..	14	—	4	2	1	4	—
1941 ... ..	14	1	4	2	1	4	—
1942 ... ..	15	3	6	2	2	4	—
1943 ... ..	15	3	6	2	2	4	1

N.B.—<sup>(1)</sup> Fouad Sanatorium, Helwan, was attached to Chest Diseases Section in September 1934.

<sup>(2)</sup> Maritime Sanatorium, Alexandria, was attached to Chest Diseases Section in September 1936.





TABLE NO. 40.—ANNUAL RETURN OF SANATORIA AND CHEST DISEASES

(New T.B. Cases in the Dispensary) or (New Patients admitted)																									
New Cases seeking Treatment (Dispensary)	T.B. Cases				Age Groups																Professions				
	Total	Sputum +	X-Ray +	Other Chest Diseases	From 1-9 Years		From 10-19 Years		From 20-29 Years		From 30-39 Years		From 40-49 Years		From 50-59 Years		Over 60 Years		Vendors	Officials	Workmen	Peasants	Students	No Occupation	
					M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.							
9,454	782	575	207	8672	19	9	81	49	178	80	161	65	67	26	27	9	11	--	21	83	311	53	44	270	
8,888	870	536	314	7351	8	5	80	50	242	103	161	62	67	38	22	5	4	--	56	60	324	109	25	276	
8,505	722	443	279	7782	19	16	107	59	187	82	108	41	40	21	22	10	6	1	51	77	261	51	21	261	
8,652	476	300	176	8176	6	6	38	27	123	46	95	40	53	17	17	4	3	1	16	14	117	149	12	168	
9,640	299	235	64	9341	1	6	20	13	70	30	68	29	42	6	13	--	1	--	16	30	76	75	9	93	
10,870	324	244	80	10546	5	2	21	12	98	35	65	29	29	15	9	1	1	2	13	6	87	111	6	102	
7,947	230	173	57	7420	2	4	28	19	63	26	34	22	13	4	10	3	--	2	5	7	85	33	5	95	
3,845	154	105	49	3691	3	4	19	6	31	21	26	17	12	5	7	2	--	1	6	9	31	34	4	70	
4,385	374	297	57	431	4	4	50	14	104	45	60	21	31	7	10	1	3	--	24	22	74	121	5	168	
6,677	638	440	198	6039	27	10	66	53	200	54	99	36	50	14	14	3	11	1	40	61	299	17	11	210	
7,243	590	360	230	6653	32	29	49	61	132	57	93	45	38	19	21	5	7	2	28	11	188	88	1	260	
4,202	218	210	8	349	--	2	16	9	51	18	49	31	22	10	4	4	2	--	7	9	30	83	4	80	
5,866	231	184	47	5635	2	8	15	17	34	22	41	35	8	18	5	10	5	11	9	13	25	115	3	66	
3,172	186	156	30	2986	--	1	7	11	35	17	32	38	19	6	12	2	3	3	12	10	38	44	--	82	
1,205	85	64	21	947	--	1	4	1	27	7	24	9	6	4	1	1	--	--	2	9	22	24	6	22	
TOTAL	100551	6139	4322	181789129	128	107	601	401	1575	643	1119	523	497	210	194	60	57	24	396	420	1973	1107	110	2163	
	835	11	9	2	824	--	--	1	1	1	5	1	1	--	--	1	--	--	1	--	3	--	--	7	
	507	34	27	7	473	--	--	1	3	5	3	6	8	2	1	2	1	2	1	1	2	15	--	16	
	630	44	31	13	531	--	--	1	12	4	16	4	4	1	1	1	--	--	1	3	10	17	2	11	
	1,107	1087	800	287	20	13	16	147	109	339	129	165	73	62	20	25	11	7	55	130	324	124	85	389	
	897	886	613	273	11	33	32	104	80	269	99	138	56	37	13	19	13	3	33	80	303	100	68	313	
TOTAL	2,004	1913	1413	560	31	46	48	251	189	599	228	303	129	99	33	44	24	10	1	88	210	627	224	153	702

Exam. of (Sanat.)	Old Cases (Disp.)				Visits (Disp.)		Discharged Patients														
	Teeth	Nose	Throat	Ears	Total	T.B. Cases	Under Observation	Contacts	Other Chest Diseases	Nurses Visits	M.O. Visits	Total	Sputum on Discharge		Improved	Stationary	Worse	Died	Ability to Work		
													Pos.	Neg.					Complete	Partial	Un able
					11,115	7,102	3,751	148	114	2,453	366	277	163	114	130	24	105	18	6	123	130
					9,509	6,930	768	806	1,005	1,666	372	314	161	153	181	44	79	10	1	163	137
					8,826	6,256	1,310	951	39	1,796	340	280	105	158	155	62	43	20	6	146	108
					3,410	3,137	44	33	196	1,458	356	157	77	80	113	24	15	5	1	72	79
					7,914	4,043	498	361	3,042	1,805	327	101	52	45	64	22	12	3	5	47	46
					17,068	6,505	2,771	1,061	6,731	1,206	325	58	27	31	35	18	3	2	—	23	33
					8,906	3,616	589	390	4,311	1,535	406	51	9	12	13	7	2	3	—	13	5
					6,039	3,096	722	99	2,122	542	248	33	14	9	19	—	14	—	—	19	14
					6,845	3,468	287	321	2,769	1,184	355	49	19	30	36	10	3	—	—	41	8
					11,096	8,511	1,963	588	34	2,011	354	93	35	52	57	14	17	5	2	44	42
					7,079	4,122	416	183	2,358	2,213	412	195	115	80	139	26	23	7	3	81	104
					3,981	1,517	179	630	1,655	1,473	388	35	29	6	21	8	6	—	1	19	15
					3,186	2,146	561	105	374	1,560	394	53	35	18	33	10	10	1	12	25	15
					3,203	2,262	484	169	288	1,234	405	13	4	9	8	4	1	—	—	7	6
					1,882	498	170	84	1,130	378	104	—	—	—	—	—	—	—	—	—	—
TOTAL					110089	63,209	14,513	5,929	26,438	22,514	5,552	1,709	845	801	1,064	273	333	74	37	8,6	742
					325	90	3	—	232	—	—	5	2	3	3	—	2	—	—	—	—
					315	159	61	24	71	—	—	—	—	—	—	—	—	—	—	3	2
					863	133	102	31	617	44	13	—	—	—	—	—	—	—	—	—	—
	1017	215	372	173	—	—	—	—	—	—	—	1,071	605	466	631	185	162	93	26	606	346
	855	660	660	660	—	—	—	—	—	—	—	846	432	411	509	172	86	79	1	419	347
TOTAL	187	875	1032	833	—	—	—	—	—	—	—	1,917	1,037	880	1,140	357	248	172	27	1,025	693

	Helwan	Abbassia	Mansoura	Zagazig	Damietta	Fayoum	Tanta	Assiut
Number of patients on 1st January 1943	444	410	20	18	32	19	20	—
Number of patients admitted during the year	1107	897	73	59	109	34	52	51
Number of patients discharged during the year	1071	846	63	58	107	34	54	36
Average duration of stay	144	179	160	115	89	169	132	108
Number of patients on Dec. 31, 1943	480	461	25	19	34	19	18	15



Treatment					Operations												No. of Deaths	No. of patients	REMARKS
Tubercule	Gold	Other Injections	Exercise Treatment	General Treatment.	Aspiration	Intrapleural Pneumothorax		Internal Pneumonolysis	Phrenic Operations	Extrapleural Pneumothorax		Plombage Oleothorax	Thoracoplasty	Thoracotomy	Pleural Lung Drainage	Bronchoscopy or Bronchography			
						Induction	Refills			Induction	Refills								
—	—	—	—	—	1	—	681	—	—	—	—	—	—	—	—	—	237	—	Boulac Dispensary
—	—	—	—	—	16	1	1-576	—	—	—	—	—	—	—	—	—	129	8	Mohaddayan "
—	—	—	—	2571	27	—	1-128	—	—	—	—	—	—	—	—	—	249	—	Khalifa "
—	—	—	—	—	13	15	1-722	—	—	—	—	—	—	—	12	—	73	2	Manfouara "
—	—	—	—	—	5	26	1-336	—	—	—	—	—	—	—	—	—	58	4	Tanta "
—	—	—	—	—	—	51	1-839	—	—	—	—	—	—	—	—	—	22	4	Zagazig "
—	—	1-2	891	2725	15	2	219	—	—	—	—	—	—	—	—	—	60	—	Michalia el Kobra "
—	—	—	—	33	5	5	3-6	—	—	—	—	—	—	—	—	—	31	11	Shebin el Kham "
—	—	—	—	—	13	27	1-070	—	—	—	5	—	—	—	—	—	68	—	Damanhour "
—	—	—	—	—	18	3	920	—	—	—	—	—	—	—	—	—	184	—	Alexandria "
—	29	44	64	119	75	76	2-223	—	—	—	—	—	—	—	—	—	93	1	Damietta "
—	212	316	—	—	22	14	617	—	—	—	—	—	—	—	—	—	82	1	Fayoum "
—	—	—	—	837	11	10	252	—	—	—	—	—	—	—	—	—	36	4	Assint "
—	—	—	—	—	21	—	126	—	—	—	—	—	—	—	—	—	45	—	Minia "
—	—	—	—	—	3	—	113	—	—	—	—	—	—	—	—	—	17	8	Qena "
—	271	512	915	335	245	230	14 208	—	—	—	5	—	—	—	12	—	387	43	
—	—	—	—	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Menouf Branch.
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Samalut Branch.
—	—	—	—	—	1	—	31	—	—	—	—	—	—	—	—	—	6	5	Luxor Branch.
—	88	2592	48	76	93	339	5-684	199	104	—	—	—	—	1	7	6	93	—	Fouad I Sanat. Helwan
43	227	7051	113	362	203	479	7-475	171	116	1	—	—	32	—	7	1	—	—	Chest D. H. Abbassia.
43	315	9643	161	43	296	818	13-159	310	220	1	—	—	32	1	14	7	93	—	TOTAL

TABLE NO. 41.—ANNUAL RETURN OF THE WORK OF

	Died	Discharged	Diseases attacked children duri g their residence						Result of mantoux test in the child		NEW CHILDREN								
											Details of their relative Patients								
											Condition				Relation				
											Lesion		Alive	Died	Other relative	Sister	Brother	Mother	Father
			Other diseases	Skin	Ophthalmic	Chest	Intestinal	Stomach	+	—	Sp.	X.R.							
Zeitoun Préventorium... ..	16	88	32	12	29	7	18	31	31	14	38	65	96	7	3	—	7	47	46
Marg " ... ..	—	74	11	50	2	—	—	—	11	—	9	14	35	26	—	—	4	19	40
Mehalla El Kobra Prevent.	1	24	5	8	—	2	1	—	41	—	—	—	38	3	1	—	3	12	25
Assiut Prevent. ... ..	—	32	87	35	—	1	54	3	8	4	8	9	11	3	4	—	—	8	6
TOTAL ...	17	218	135	105	31	10	73	34	91	18	55	88	180	39	8	—	11	86	117

	Zeitoun	Marg	Mehalla El Kobra	Assiut
N.B.—No. of Children on January 1, 1943... ..	82	39	21	34
“ “ admitted during the year ...	103	80	41	35
“ “ discharged “ “ ...	104	74	24	32
“ “ remaining on Dec. 31, 1943 ...	81	45	38	37

TABLE NO. 42—ANNUAL RETURN OF CASES TREATED IN ALEXANDRIA MARITIME SANATORIUM

OUT-PATIENT SECTION																				
New Patients											Old Patients					Treatment		Minor Operations	Dressings	X-Rays
Total	Under 5 years		5-10 years		Over 10 years		Rickets	T.R. Spine	T.B. bones and joints	Other diseases	Total	Rickets	T.B. Spine	T.B. bones and joints	Other diseases	By Electricity	By Ultra Violet			
	M.	F.	M.	F.	M.	F.														
298	37	44	24	28	81	84	26	32	63	177	240	32	37	61	119	10	151	66	171	90
271	8	11	26	8	122	96	—	57	81	129	81	—	33	34	14	—	—	—	—	—
569	45	55	50	36	203	180	26	89	144	306	330	32	70	95	133	10	151	66	171	90

	Alexandria	Helwan
Number of patients on January 1, 1943 ... ..	65	—
“ “ “ admitted during the year ...	120	220
“ “ “ discharged during the year...	106	122
“ “ “ remaining on Dec. 31, 1943...	79	98



THE PREVENTORIA DURING 1943

ADMITTED

AGES																								No. of new children
Above 10 years		10 years		9 years		8 years		7 years		6 years		5 years		4 years		3 years		2 years		1 year		Under one year		
F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	
—	—	—	—	—	—	—	2	2	1	7	7	11	5	3	10	5	3	10	3	3	3	19	9	103
—	2	5	10	5	4	7	5	12	18	4	1	1	1	1	—	2	1	2	—	1	—	2	—	80
1	1	—	1	3	2	3	—	1	2	5	4	2	2	2	1	1	—	4	—	3	1	—	2	41
—	—	—	2	1	—	—	—	3	3	—	—	5	5	1	—	—	2	4	2	—	1	3	3	35
1	3	5	13	9	6	10	7	18	24	16	12	19	13	7	11	8	6	20	5	7	5	24	14	259

AND PRINCESS KHADIGA ARBAS HALIM HOSPITAL FOR BONE DISEASES AT HELWAN DURING THE YEAR 1943.

IN-PATIENT SECTION																							
New Patients												Discharged					Treatment		Major Operations	Plaster	X-Rays		
Total	Under 5 years		5-10 years		Over 10 years		T.B. Spine	T.B. Hip	T.B. Knee	T.B. other joints	Other diseases	Total	Cured	Improved	Stationary	Discharged in plaster	By Electricity	By Ultra Violet					
	M.	F.	M.	F.	M.	F.																	
120	10	13	14	12	43	28	38	22	20	22	18	106	17	59	18	12	—	47	20	93	191	Alexandria Maritime Sanat.	
220	4	2	25	12	110	67	63	24	24	30	79	122	42	29	40	11	—	83	19	126	343	Princess Khadiga Abbas Halim Hosp. for Bone diseases at Helwan	
340	14	15	39	24	153	95	101	46	44	52	97	228	59	88	58	23	—	130	39	219	534		

## Chapter VII.—VENEREAL AND SKIN DISEASES

According to Table No. 47, a total of 204,511 persons attended the venereal and skin diseases clinics during the year 1943 and were found suffering from one or the other of these diseases, as compared with 168,074 in 1942.

The number of visits paid by patients to clinics this year was 739,376 as against 548,545 in 1942.

### *Gonorrhoea :—*

The number of gonorrhoea cases treated during this year was 24,891 as against 30,702 in 1942.

It is worthy of mention that chronic gonorrhoea is more prevalent among women than men and is most probably due to neglect of treatment.

### *Syphilis :—*

A total of 16,914 cases of syphilis was recorded during the year as against 15,147 in 1942.

### *Other Venereal Diseases :—*

There were 76,695 persons under treatment from other venereal diseases during the year as against 119,847 in the previous year.

### *Attendance in Clinics :—*

It is observed that the number of patients who absent themselves before complete recovery is on the rise. It is hoped that with more active propaganda and persuasion of the patients to complete treatment this absenteeism will decline.

### *Treatment Technique :—*

At the present time, venereal diseases clinics are being supplied with sulphonamide preparations, Sulpha<sup>+</sup>thiazol and Sulphadiazol for the treatment of gonorrhoea. It is proposed to introduce penicillin in the treatment of gonorrhoea, syphilis and other skin diseases.

TABLE NO. 43.—TREATMENT DURING  
THE LAST FIVE YEARS

Year	No. of Clinics	New Patients	No. of Visits
1939... ..	20	143,660	907,996
1940... ..	23	145,801	622,220
1941... ..	23	148,194	636,503
1942... ..	25	168,074	548,545
1943... ..	28	204,511	739,376



TABLE NO. 44. — NUMBER OF BEDS DURING THE YEAR 1943.

Hospital	No. of beds
Hod-el-Marsoud ... ..	285
El-Kalbary ... ..	209
<b>TOTAL ... ..</b>	<b>494</b>

TABLE NO. 45.—DISTRIBUTION OF BEDS

Hospital	1st Class	2nd Class	3rd Class Spec.	3rd Class Orm.	Children	Opth. Branch	Total Beds for Patients	Beds for Staff	Total No of Beds
Hod-el-Mar-soud... ..	—	—	14	263	—	—	277	8	285
El-Kabbary	—	—	20	183	—	—	203	6	209
<b>TOTAL ...</b>	<b>—</b>	<b>—</b>	<b>34</b>	<b>446</b>	<b>—</b>	<b>—</b>	<b>480</b>	<b>14</b>	<b>494</b>

TABLE NO. 46—NUMBER OF IN & OUT PATIENTS TREATED AND VISITS TO HOSPITALS DURING THE YEAR 1943.

Hospital	In Patients	Out patients	No. of visits
Hod-el-Mamoud ... ..	3,312	3,912	14,636
El-Kalbary ... ..	1,936	743	2,482
<b>TOTAL ... ..</b>	<b>5,248</b>	<b>4,655</b>	<b>17,118</b>







TABLE NO. 48.—SHOWING NUMBER OF VENEREAL DISEASES CASES TREATED

Clinic	Gonorrhoea						Syphi-					
	Acute		Chronic		Total		Primary		Secondary		Tertiary	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Sayeda Zinab ...	759	675	1,195	3,086	1,954	3,761	280	32	203	123	35	21
Sh ubra ...	240	140	325	1,086	565	1,226	111	13	100	62	5	1
Gamalia ...	1,339	1,932	506	2,763	1,845	4,695	498	59	171	95	27	16
Port-Said ...	196	3	16	155	212	158	97	4	73	31	12	4
Suez ...	122	—	27	485	149	485	47	1	29	10	10	4
Damanhour ...	130	210	22	352	152	502	72	2	36	41	29	18
Tanta ...	211	114	160	334	371	448	355	12	89	49	49	36
M halla el Kobia ...	175	103	29	98	204	201	89	5	68	51	27	12
Mansoura ...	244	23	47	1,135	291	1,158	56	14	53	37	22	27
M t-Ghamr ...	27	17	6	17	33	34	10	4	10	18	2	1
Zagazig ...	382	34	—	1	382	35	149	12	71	56	22	22
Shebin el Kom ...	76	52	20	642	96	694	41	9	52	35	28	21
Fayoum ...	84	116	32	67	116	183	46	4	270	200	94	102
Sennouris ...	45	30	—	—	45	30	8	—	20	30	15	36
Beni-Suef ...	108	14	16	214	124	228	45	5	58	49	17	9
Minia ...	175	1	8	65	183	66	265	6	120	82	9	13
Assiut ...	179	40	59	54	248	94	10	10	170	122	60	43
Girga ...	36	7	23	30	59	37	58	3	107	174	24	9
Tah'a ...	6	—	2	11	8	11	6	—	5	32	36	67
Sorhag ...	42	1	18	3	61	4	18	3	85	83	35	23
Qena ...	31	12	36	50	67	62	66	4	64	44	12	21
Nag' Hammadi ...	35	17	12	26	47	43	38	—	158	167	27	22
Luxor ...	20	2	21	14	41	16	51	5	38	31	17	10
A wan ...	45	14	75	100	120	114	72	5	33	21	9	2
Benha ...	48	4	82	358	130	362	12	—	14	10	12	18
M haram Bey ...	31	166	234	272	551	438	89	29	258	183	134	104
Karm uz ...	516	329	366	454	912	780	296	99	514	406	178	139
TOTAL ...	5,619	4,053	3,347	11,872	8,966	15,925	2,985	340	2,869	2,242	947	801

TABLE NO. 49.—SHOWING NUMBER OF VENEREAL DISEASES CASES TREATED

Locality of Clinic	Patients Completed Treatment												
	Gonorrhoea			Syphilis			Other Diseases			Grand Total	Percentage		
	M.	F.	Total	M.	F.	Total	M.	F.	Total		Gonor- rhœa	Syphilis	Other Diseases
Sayeda Zeinab ...	2,502	4,502	7,004	999	459	1,458	3,429	3,390	6,819	15281	45.8	9.5	44.7
S ūbra ...	213	690	903	14	5	19	4,574	7,564	12138	13060	6.9	1	93
Gamalia ...	94	1,534	2,479	2.8	140	428	359	500	859	3,766	65.8	11.3	22.9
Port-Said ...	27	26	53	3	19	22	3,741	10,048	13789	13864	4	2	99.4
Suez ...	26	143	169	—	—	—	2,527	4,784	7,311	7,480	2.2	—	97.8
Damanhour ...	24	56	80	—	—	—	4,137	5,932	10069	10149	8	—	99.2
Tanta ...	121	183	304	225	107	332	2,023	1,675	3,678	4,314	7	7.7	85.3
M halla el Kobra.	51	14	65	6	3	9	1,331	1,030	2,361	2,435	2	1	97
Mansoura ...	23	103	126	3	13	16	1,390	1,367	2,757	2,809	4.3	5	95.2
Mit-Ghamr ...	7	6	13	11	12	23	1,135	1,961	3,096	3,132	5	7	98.8
Zagazig ...	—	—	—	7	9	16	35	37	72	88	—	18.2	81.8
Shebin el Kom ...	—	—	—	—	—	—	1,940	3,800	5,820	5,820	—	—	100
Fayoum ...	12	34	46	3	3	6	603	1,000	1,603	1,655	2.7	5	96.8
S ennuris ...	13	14	27	20	55	84	535	1,629	2,164	2,275	1.2	3.6	95.2
Beni-Suef ...	46	67	113	6	11	17	1,941	1,530	3,471	3,601	3.1	5	96.4
Minia ...	32	8	40	6	7	13	44	55	99	152	26.3	28.5	65.2
Assiut ...	8	8	16	—	—	—	—	—	—	16	100	—	—
Girga ...	34	14	48	51	121	172	3,980	2,830	6,810	7,030	6	2.5	96.9
Tahta ...	2	8	10	681	1177	1858	1,714	2,143	3,857	5,725	2	32.4	67.4
Sorhag ...	12	1	13	—	—	—	649	526	1,175	1,188	1	—	99
Qena ...	2	2	4	—	—	—	—	—	—	4	100	—	—
Nag' Hammadi...	18	17	35	43	52	95	—	—	—	130	27	73	—
Luxor ...	—	—	—	—	—	—	236	176	412	412	—	—	100
A wan...	5	6	11	—	1	1	—	—	—	12	91.6	8.4	—
Benha ...	16	7	23	—	—	—	439	404	843	866	2.7	—	97.3
M ha am B y ...	272	196	468	491	292	773	786	538	1,324	2,565	18	31	51
Kum uz ...	398	301	700	695	449	1144	4,155	2,814	6,969	8,813	8	13	79
TOTAL ...	4,809	7,941	12,750	3,551	2,935	6,486	41,703	55,793	97,496	116732	—	—	—



AT THE SKIN AND VENEREAL DISEASES CLINICS DURING THE YEAR 1943

lis								Other Diseases					
Latent		Hereditary		Nervous		Total		Chancroid		Other Venereal Diseases		Total	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
101	185	34	28	2	—	655	389	162	59	726	3,944	3,888	4,003
48	58	27	35	2	1	293	170	28	—	693	1,388	721	1,388
95	162	48	80	—	—	839	412	224	16	2	—	296	16
80	85	16	26	—	—	278	150	58	1	6,014	6,668	6,072	6,669
21	42	2	6	—	—	109	63	8	—	11	7	19	7
10	49	9	6	—	—	156	116	53	5	5,048	7,833	5,101	7,838
43	62	17	25	—	—	553	184	16	—	—	—	16	—
77	92	37	23	2	2	300	185	—	—	1,905	1,407	1,905	1,407
32	145	16	15	—	—	179	238	244	28	2,336	2,199	2,580	2,227
32	85	53	34	—	—	107	142	—	—	—	—	—	—
16	69	4	5	2	—	264	164	95	2	4,042	3,323	4,137	3,330
28	185	97	54	—	—	246	304	2	1	3,277	3,868	3,279	2,369
18	29	5	6	—	—	433	341	—	—	—	—	—	—
—	13	12	27	—	—	55	106	—	—	—	30	—	30
17	23	7	12	3	1	147	104	62	6	—	—	62	6
33	65	35	30	4	1	466	197	53	—	702	263	755	263
133	368	58	84	—	—	531	627	—	—	—	—	—	—
—	1	16	26	—	—	205	213	—	—	—	—	—	—
134	543	36	130	—	—	217	772	—	—	893	2,316	893	2,316
7	24	51	39	3	1	199	173	2	—	—	—	2	—
61	216	42	61	7	6	252	352	—	—	309	432	309	432
45	132	3	37	1	—	272	358	12	16	—	—	12	16
7	19	24	11	—	—	137	76	1	—	—	—	1	—
56	89	31	39	5	1	206	157	—	—	362	429	362	429
27	71	21	18	1	1	87	118	15	1	302	411	317	412
376	247	32	25	48	34	837	622	242	34	115	779	357	813
157	146	48	39	82	54	1,275	883	341	90	5,783	3,326	6,124	4,016
1,554	3,210	781	921	162	102	9,298	7,616	1,683	259	35,520	39,228	37,208	39,487

AT THE SKIN AND VENEREAL DISEASES CLINICS DURING 1943

Patients who Ceased to attend before Completion of their Treatment

Gonorrhoea			Syphilis			Other Diseases			Grand Total	Percentage		
M.	F.	Total	M.	F.	Total	M.	F.	Total		G.	Syphilis	Other Dis.
3,182	5,435	8,617	1,593	1,000	2,593	1,023	1,977	3,000	15,110	57	17.2	25.8
78	179	257	8	19	57	10	10	240	554	46.4	10.2	43.4
524	1,029	1,553	529	249	777	120	1	121	2,511	63.4	31.6	5
164	129	293	255	115	370	3,772	10,132	13,905	14,468	2.2	2.3	95.5
25	53	78	28	15	43	896	1,409	2,305	2,26	3.2	1.5	95.3
87	425	512	120	108	228	711	1,601	2,312	3,052	16.7	7.5	75.8
250	265	515	223	77	405	821	841	1,662	2,582	19.9	15.6	64.5
28	20	48	36	12	48	—	—	—	9	5.0	50	—
273	1055	1,328	181	303	484	296	229	525	2,337	55.9	21	23.1
19	16	35	15	4	63	824	1,100	1,900	2,028	1.6	3.1	95.3
269	30	299	227	123	353	4,007	3,291	7,298	7,950	3.8	4.3	91.9
77	543	620	193	251	444	—	—	—	1,064	5.8	42	—
87	225	312	412	388	800	160	1,381	1,481	2,593	1.2	31	57
32	16	48	269	725	994	287	245	52	1,574	3.2	63.1	33.7
58	88	146	96	44	140	1,117	840	1,957	2,243	6.5	6.3	87.2
142	22	164	340	26	376	23	20	43	583	2.8	64	8
13	5	18	192	223	415	—	—	—	433	4.3	95.7	—
25	22	47	45	55	100	153	207	365	512	9.2	19.5	71.3
6	3	9	425	635	1061	153	165	318	1,387	6	76.4	23
49	3	52	124	119	243	1,718	967	2,685	2,980	2	8	90
70	45	115	173	324	497	3	11	14	626	18.3	79.5	2.2
2	—	2	249	365	614	—	—	—	616	3	99.7	—
15	2	17	40	32	72	65	18	83	172	10	41.7	48.3
73	60	133	135	115	250	—	—	—	383	34.7	65.3	—
76	52	128	49	101	150	705	412	1,117	1,595	9.2	10.7	80.1
279	242	521	598	364	962	364	241	605	2,088	2.9	46	29
514	478	992	921	524	1445	1,603	1,112	2,720	5,157	19.3	28.1	52.6
6,417	10,442	16,859	7,611	6,372	13,983	19,781	26,337	46,118	76,960	—	—	—

TABLE No. 50.—SHOWING HOSPITALS AND PATIENTS TREATED THEREIN DURING THE YEAR 1943

Hospitals	In-Patients						Out-Patients	
	Treated during the year	Discharged during the year				Remaining	New Cases	No. of Visits
		Cured	Relieved	Not imp.	Died			
Hod- l-Marsoud ...	3,312	1,443	1,576	—	—	293	450	14,936
El-Kabbary ... ..	2,016	1,922	—	—	—	94	743	2,482
<b>TOTAL ... ..</b>	<b>5,328</b>	<b>3,365</b>	<b>1,576</b>	<b>—</b>	<b>—</b>	<b>387</b>	<b>1,193</b>	<b>17,118</b>

TABLE No. 51.—NUMBER OF IN-PATIENTS TREATED & NUMBER OF DEATHS DURING THE YEAR 1943

Hospital	No. of In patients	No. of deaths	Percentage
Hod-el-Marsoud ... ..	3,312	—	—
El-Kalbary ... ..	2,016	—	—
<b>TOTAL ... ..</b>	<b>5,328</b>	<b>—</b>	<b>—</b>



## Chapter VIII.—MENTAL DISEASES

### *Accommodation.*

The number of bedding stood where it was viz 3334 beds.

### *Patients.*

The average daily number resident was 3962 and the number remaining on 31 December 1943, was 4020.

### *Lunacy Act.*

Provisions of this Act were given a final revision and it is hoped it will be laid before Parliament in its session of 1943-1944.

### *Admissions.*

The number of patients remaining in mental hospitals on January 1, 1943 was 3939. During the year 1943, admissions numbered 2275, thus the total number of cases treated was 6214. Discharges numbered 1553 and deaths 641 ; those remaining on December 31, 1943 were 4020.

### *Accused Lunatics.*

180 accused persons sent from the Procurer General were examined during the year under report ; also 35 reports were made on inmates originally admitted as ordinary patients ; this brings the total number of reports sent to 215. The number of accused persons in residence at the end of 1943 was 883.

### *Discharges.*

The number of cases discharged was, 82 recovered, 1052 relieved, 376 not improved and 32 not insane.

### *Pellagra.*

The number of pellagrous admissions was 689 patients of whom 177 were females and 512 males as against 608 in 1942.

### *Treatment.*

(1) The Wassermann reaction was carried out in the Central Laboratories of the Ministry. Specimens of cerebro-spinal fluid were also taken from patients where this was required.

(2) 24 cases were treated in the out-patients clinic.

(3) A great number of patients were treated in the Dentistry and Ophthalmic Departments.

(4) The number of cases treated locally from physical ailments amounted to 17181.

(5) The Chest Diseases Division of the Ministry examined such patients and staff of Abbassia Hospital as were suspected of pulmonary tuberculosis. A similar survey will be made on Khanka patients and appropriate measures will be taken according to results.

### *Electric Shock Apparatus.*

The Abbassia Hospital was supplied with an apparatus for shocktherapy. It was employed after training the M.O's., in its use.

### *Accidents.*

31 major accidents occurred in both hospitals. Minor accidents numbered 1378. A male patient of Abbassia Hospital succeeded in committing suicide by hanging himself in a side room.

### *Escapes.*

Eleven patients escaped from both hospitals, 6 from Khanka and 5 from Abbassia.

### *Lectures.*

Lectures were delivered to the nursing staff of both hospitals as well as to senior students of the Faculty of Medicine of Fouad I. University. Other lectures on Psychological Medicine and Neurology were delivered to medical officers attending the post graduate course in Psychological Medicine and Neurology.

## Chapter IX.—HEALTH PROPAGANDA

The following is a summary of the Propaganda work done during the year :

I.—A new medium of propaganda was introduced during this typhus season which consisted of a huge model louse mounted on a Propaganda vehicle. This was accompanied by a most interesting simple dialogue on the evils of the louse.

II.—Propaganda work was extended to Alexandria where health propaganda meetings were held for the benefit of the various classes of the population,

III.—A good deal of health propaganda work was done among the pupils of compulsory schools where lectures on hygiene were given.

IV.—Propaganda Units contributed to the instruction of the villagers by utilising public playgrounds in rural towns for holding monthly health propaganda meetings.

V.—In response to the request of various societies and corporations, the Propaganda Units held meetings for their members, e.g. the Combined Transport Club, Alexandria, and the Salt and Soda Company at Wadi el Natroun.

VI.—These Units also took an active part in the campaign against malaria. Health propaganda was undertaken in all towns throughout the country and in villages, too.

VII.—In addition to the above, the units continued last year's activities, namely :—

- (1) Holding meetings in Cairo public parks during summer, where educational as well as health instructional films were shown.
- (2) Cinema shows for workmen of certain corporations.
- (3) Display of educational films for the pupils of primary and secondary schools and of El-Azhar University.
- (4) Health propaganda meetings for men of the territorial army and Police Forces.
- (5) Propaganda meetings on temperance in chief towns of provinces and Markazes.
- (6) Special meetings in orphanages, social centres and charitable institutions.
- (7) Propaganda meetings in sanatoria, hospitals and child welfare centres.
- (8) Broadcasts on health problems.



TABLE No. 52.—STATEMENT REGARDING THE PROPAGANDA WORK ACHIEVED DURING THE YEAR

	No.	No. of spectators
1. Lectures broadcasted ... ..	16	—
2. Meetings in public parks ... ..	52	75,000
3. Meetings in religious fairs ... ..	25	60,000
4. Festivals and anniversaries ... ..	51	30,000
5. Entertainments in schools ... ..	23	90,000
6. „ „ orphanages ... ..	18	7,000
7. „ „ El Azhar ... ..	11	5,000
8. „ „ for Army forces ... ..	7	2,000
9. „ „ Territorial force ... ..	8	2,500
10. „ „ Police force ... ..	5	1,500
11. „ „ Labourers ... ..	23	10,000
12. Propaganda in day time at Cairo ... ..	143	90,000
13. Health propaganda in cinemas ... ..	2	1,900
14. Health propaganda, Alexandria, in day-time ... ..	26	30,000
15. Health propaganda, Alexandria, at night-time ... ..	13	14,000
16. Number of pamphlets distributed ... ..	13,100	—
17. „ „ of plays produced and acted ... ..	1	800
18. Anti-malaria propaganda meetings ... ..	37	35,000
19. Temperance propaganda meetings ... ..	14	15,000
20. Health propaganda in popular quarters ... ..	14	13,000
21. „ „ „ various societies and institutions ... ..	85	70,000
22. „ „ „ Governorates and cities in the provinces ... ..	17	20,000
23. „ „ „ child welfare centres and hospitals ... ..	5	3,000
24. „ „ „ clubs ... ..	15	16,000
25. „ „ „ festivals in Sanatoria ... ..	18	20,000
26. „ „ „ social centers ... ..	81	70,000
27. „ „ advices published in the daily news papers ... ..	39	—

TABLE No. 53.—WORK DONE BY THE UNITS IN THE PROVINCES.

	No.	No. of spectators
1. Villages visited ... ..	399	—
2. Patients treated ... ..	30,220	—
3. Houses visited ... ..	58,611	—
4. Schools visited ... ..	181	4,200
5. Lectures given at schools ... ..	3,720	256,416
6. Villages where evening meetings were held ... ..	334	—
7. Lectures given during evening meetings ... ..	2,411	1,618,100
8. Short lectures given at day-time ... ..	2,859	169,459

## Part III.—MEDICAL TREATMENT

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### Chapter X.—GENERAL HOSPITALS

#### *Hospitals.*

The number of general hospitals in operation during the year was 81 ; of these 26 are situated in the Governorates and Chief towns of Provinces, 52 in District chief towns and 3 General Diseases clinics.

#### *Accommodation.*

The total number of hospital beds this year was 6363, of which 5502 beds are reserved for patients and 861 for personnel.

#### *Treatment.*

In view of the prevailing war time conditions, a proportion of the beds in certain hospitals was reserved to meet emergency demands. The number of in-patients treated during the year was 87,326. The out-patients numbered 1,749,732. These attended the out-patients clinics 3,253,737 times.

#### *Operations.*

A total of 32,110 operations were carried out in the in-patient departments and 71,096 in the out-patient departments, making a total of 103,206 operations performed during the year, as compared with 33,007, 79,024 and 112,031 respectively in the previous year.

#### *X-Ray Examination and Treatment.*

The number of cases examined and treated by X-Ray during the year was 19,605 as against 26,746 in 1942.

#### *Deaths.*

5,860 deaths were recorded during the year amongst a total of 87,326 in-patients giving a ratio of 6.71 per cent.



TABLE No. 54.—SHOWING GENERAL HOSPITALS UNDER GENERAL HOSPITALS SECTION  
CONTROL SINCE 1933

Year	Hospitals at Capitals of Provinces and Governorates	Hospitals in Chief Towns and Districts	Village Hospitals	Out-Patient Clinics
1933 ... ..	19	44	49	—
1934 ... ..	19	45	50	1
1935 ... ..	19	45	50	3
1936 ... ..	19	45	50	3
1937 ... ..	20	48	60	3
1938 ... ..	20	48	62	3
1939 ... ..	20	48	62	3
1940 ... ..	20	51	62	3
1941 ... ..	20	52	Separated from Hosp. Section	3
1942 ... ..	20	52		4
1943 ... ..	26	52		3

TABLE No. 55.—GIVES THE NUMBER OF BEDS IN THE GENERAL HOSPITALS

Year	No. of Beds	Remarks
1933 ... ..	6,482	
1934 ... ..	5,309	Kasr el Aini Hospital was separated from the Ministry.
1935 ... ..	5,852	
1936 ... ..	5,964	
1937 ... ..	6,341	
1938 ... ..	6,822	
1939 ... ..	6,979	
1940 ... ..	6,926	
1941 ... ..	6,969	
1942 ... ..	6,880	
1943 ... ..	6,363	Alexandria Hospital was separated from the Ministry.

TABLE No. 56.—SHOWS THE DISTRIBUTION OF BEDS

Hospital	1st Class	2nd Class	3rd Class Special	3rd Class Ordinary	Children	Ophth. Branch	Total beds for patients	Beds for Staff	Total No. of Beds
King's ... ..	—	—	—	217	9	—	226	81	307
Demerdash ... ..	6	14	—	29	7	44	366	140	506
Incurable Diseases, Helwan ... ..	—	—	—	118	—	—	118	12	130
Port-Said ... ..	2	2	12	165	13	—	194	14	208
Suez ... ..	4	11	—	193	—	25	233	18	251
Damietta ... ..	1	2	—	87	—	35	125	12	137
Damanhour ... ..	2	—	—	107	2	—	111	11	122
Tanta ... ..	—	4	—	218	2	—	224	28	252
Mansoura ... ..	—	—	—	192	10	—	202	11	213
Mit Ghamr ... ..	—	—	—	43	—	13	56	6	62
Zagazig ... ..	1	3	—	194	12	—	210	20	230
Shebin el Kom ... ..	—	2	—	88	—	—	90	4	94
Benha ... ..	—	—	—	108	6	—	114	7	121
Kaliub ... ..	—	—	—	74	—	—	74	4	78
Fayoum ... ..	—	1	—	144	—	—	145	6	151
Beni-Suef ... ..	—	—	—	97	—	—	97	5	102
Minia ... ..	—	2	—	108	12	—	122	9	131
Fikria ... ..	—	—	—	22	—	13	35	4	39
Maghagha ... ..	—	—	—	—	—	—	—	—	—
Assiut ... ..	—	4	—	189	11	—	204	18	222
Mallawi ... ..	—	—	—	15	—	11	26	4	30
Sohag ... ..	—	2	—	94	—	—	96	6	102
Tahta ... ..	—	—	—	26	—	—	26	2	28
Qena ... ..	—	1	—	90	—	—	91	7	98
Luxor ... ..	6	6	—	50	10	25	97	16	113
Esna ... ..	—	1	—	80	2	26	109	13	122
Aswan ... ..	1	2	—	48	—	25	76	3	79
Ismailia ... ..	—	—	—	46	—	8	54	12	66
Delingat ... ..	—	—	—	21	—	12	33	8	41
Kafr el Dawar ... ..	—	—	—	27	—	8	35	8	43
Rosetta ... ..	—	—	—	28	—	12	40	9	49
Shoubra khit ... ..	—	—	—	21	—	12	33	9	42
Edfina ... ..	—	—	—	44	—	—	44	6	50
Kom Hamada ... ..	—	—	—	29	—	11	40	9	49
El-Mahmodia ... ..	—	—	—	21	—	—	21	3	24
Dessouk ... ..	—	—	—	35	—	12	47	10	57
Mahalla el Kobra ... ..	—	—	—	114	—	—	114	13	127
Samannud ... ..	—	—	—	46	—	8	54	7	61
Tayeiba ... ..	—	—	—	32	—	15	47	2	49
Sherbin ... ..	—	—	—	26	—	12	38	9	47
Zitta ... ..	—	—	—	45	—	—	45	11	56
Kafr el Sheikh ... ..	—	—	—	36	—	—	36	5	41
Fowa ... ..	—	—	—	34	—	—	34	6	40
Kafr el Zayat ... ..	—	—	—	22	—	10	32	3	35
Abshit ... ..	—	—	—	—	—	—	—	—	—
Faraskour ... ..	—	—	—	23	—	8	31	9	40
Simbellawein ... ..	—	—	—	28	—	12	40	10	50
Manzala ... ..	—	—	—	32	—	—	32	6	38
Aga ... ..	—	—	—	48	—	8	56	9	65
Dikernes ... ..	—	—	—	47	—	8	55	10	65
Belbeis ... ..	—	—	—	24	—	12	36	9	45
Faqus ... ..	—	—	—	23	—	12	35	8	43
Minia el Kamh ... ..	—	—	—	26	—	8	34	9	43
Zawamel ... ..	—	—	—	6	—	—	6	3	9
Tala ... ..	—	—	—	23	—	12	35	6	41
Ashmoun ... ..	—	—	—	28	—	12	40	7	47
Menouf ... ..	—	—	—	36	—	16	52	10	62
Zawyet el Na'oura ... ..	—	—	—	32	—	—	32	6	38
Shebin el Kanater ... ..	—	—	—	27	—	12	39	9	48



DISTRIBUTION OF BEDS (contd.)

Hospital	1st Class	2nd Class	3rd Class Special	3rd Class Ordinary	Children	Ophth.	Total beds for patients	Staff Beds	Total No. of Beds
Saff ... ..	—	—	—	25	—	12	37	8	45
Ayat ... ..	—	—	—	38	—	16	54	11	65
Itsa ... ..	—	—	—	35	—	—	35	6	41
El Wasta ... ..	—	—	—	25	1	12	38	9	47
Beba ... ..	—	—	—	29	—	12	41	10	51
B i i Mazar ... ..	—	—	—	32	—	8	40	5	45
Al Fashn ... ..	—	—	—	23	—	11	34	6	40
Samalout ... ..	—	—	—	40	—	—	40	8	48
Deirout ... ..	—	—	—	30	—	12	42	10	52
El Badari ... ..	—	—	—	23	—	8	31	7	38
Sah l S lim ... ..	—	—	—	24	—	8	32	8	40
Abutig... ..	—	—	—	30	—	8	38	9	47
Akhmin ... ..	—	—	—	28	—	15	43	5	48
Baliana ... ..	—	—	—	24	—	12	36	9	45
Girga ... ..	—	—	—	20	—	12	32	9	41
Dishna... ..	—	—	—	25	—	8	33	9	42
Kous ... ..	—	—	—	22	—	12	34	7	41
Nag Hamadi ... ..	—	—	—	28	—	14	42	10	52
Kom Ombo ... ..	—	—	—	25	—	—	25	3	28
El fou ... ..	—	—	—	27	2	14	43	5	48
El eiba... ..	—	—	—	12	—	—	12	—	12
El Dirr ... ..	—	—	—	—	—	—	—	—	—
<b>TOTAL ... ..</b>	<b>23</b>	<b>57</b>	<b>12</b>	<b>46,62</b>	<b>99</b>	<b>649</b>	<b>5,502</b>	<b>861</b>	<b>6,363</b>

*Treatment.*

The following table shows the number of patients treated in the hospitals.

TABLE No. 57.

Year	No. of In-Patients	No. of Out-Patients	No. of atten- dance to out- patient sections	Patients treated in Village Hospitals	Attendance to Village Hospitals
<b>1939 ... ..</b>	131,068	3,275,350	5,907,039	1,239,119	2,705,883
<b>1940 ... ..</b>	104,475	3,015,066	5,435,477	1,175,477	2,671,104
<b>1941 ... ..</b>	93,029	2,596,697	2,142,282	} Separated from General Hospitals Section	
<b>1942 ... ..</b>	95,587	2,375,913	2,258,883	—	—
<b>1943 ... ..</b>	87,326	1,749,732	3,256,737	—	—

TABLE NO. 58.—SHOWING HOSPITALS AND PATIENTS TREATED THEREIN

Hospital	In-Patients						Out-Patients	
	Treated during the year	Discharged during the year				Re-maining	New Cases	No. of Visits
		Cured	Re-lieved	Not im-proved	Died			
King's... ..	3,937	2,378	858	410	110	181	82,150	155,714
Demerdash ... ..	8,028	3,679	3,147	412	485	330	141,965	267,682
Incurable Diseases, Helwan ...	199	20	5	22	8	91	2,175	6,044
Port-Said ... ..	4,606	2,822	1,138	196	231	179	55,929	115,725
Suez ... ..	3,329	1,469	1,422	85	221	112	32,861	55,229
Damietta ... ..	1,771	933	623	16	62	67	29,224	59,905
Damanhour ... ..	2,684	1,323	497	20	179	90	37,870	72,016
Tanta ... ..	4,244	2,041	1,637	78	361	127	32,239	57,137
Mansoura ... ..	3,457	1,220	1,917	50	171	99	51,924	79,695
Mit Ghamr... ..	1,053	602	250	47	118	36	27,265	44,378
Zagazig ... ..	4,175	1,846	1,795	160	249	127	39,534	74,796
Shebin el Kom... ..	1,777	785	690	25	140	61	37,514	77,433
Benha ... ..	1,397	698	546	2	79	46	21,153	32,290
Kaliub ... ..	641	305	221	8	53	54	16,135	34,825
Fayoum ... ..	2,232	1,499	357	69	178	129	26,157	57,773
Beni-Suef ... ..	1,136	420	498	10	141	67	14,992	43,443
Minia ... ..	1,719	1,252	29	17	66	86	27,938	49,949
Fikri ... ..	583	211	293	5	44	30	27,295	60,580
Maghagha ... ..	—	—	—	—	—	—	22,674	49,331
Assiut ... ..	3,745	2,276	920	161	26	125	37,790	72,401
Mallawi ... ..	393	336	—	—	44	7	29,754	54,192
Sohag ... ..	1,247	796	231	56	91	73	20,293	37,800
Tahta ... ..	635	498	6	1	106	27	20,687	36,125
Qena ... ..	856	368	360	36	60	32	30,743	46,100
Luxor ... ..	668	383	177	19	60	29	18,085	43,025
Esna ... ..	852	716	62	—	54	20	23,696	37,516
Aswan ... ..	783	479	227	7	47	29	21,973	41,488
Ismailia ... ..	1,947	1,422	262	2	155	76	53,123	71,258
Delingat ... ..	476	210	224	—	21	21	10,407	26,169
Kafr el Dawar ... ..	971	421	429	11	69	31	11,839	23,943
Rosetta ... ..	468	277	130	8	38	15	11,356	22,023
Shubrakhit ... ..	367	133	190	14	15	15	10,437	24,202
Edfina ... ..	574	202	306	25	18	23	9,581	16,125
Kom Hamada ... ..	315	205	53	4	35	13	6,250	18,928
El Mahmodia ... ..	28	121	59	9	4	15	10,970	22,142
Dessouk ... ..	1,082	802	144	22	78	36	20,000	50,469
Mehalla el Kobra ... ..	2,429	1,183	1028	9	144	95	65,587	114,909
Samannoud ... ..	651	340	242	2	26	41	12,000	28,915
Tayeba ... ..	853	379	372	38	38	26	21,042	44,619
Sherbin ... ..	751	578	123	—	21	29	10,110	33,189
Zifta ... ..	559	274	170	63	24	28	10,000	41,693
Kafr el Sheikh ... ..	786	323	352	70	39	22	20,102	43,954
Fowa ... ..	366	242	96	8	5	15	10,100	26,942
Kafr el Zayat ... ..	305	102	99	177	2	8	11,000	23,943
Abshit... ..	—	—	—	—	—	—	0,100	4,620
Faraskour ... ..	669	459	145	9	28	28	10,010	31,390
Simbellawin ... ..	580	489	17	—	48	26	12,100	19,853
Manzala ... ..	556	361	127	—	44	24	10,001	35,158
Aga ... ..	537	353	57	42	51	37	0,010	18,833
Dekernes ... ..	966	497	381	6	58	24	10,102	31,305
Belbeis... ..	458	340	74	1	31	12	11,110	32,582
Faqus ... ..	421	219	130	6	52	14	12,000	19,380
Minia el Kambh... ..	478	238	192	3	28	17	12,002	23,333
Zawamel ... ..	55	46	2	—	3	4	0,001	15,316
Tala ... ..	559	255	252	3	31	18	11,000	19,839
Ashmoun ... ..	703	418	204	—	55	26	0,000	18,062
Menouf ... ..	903	613	138	28	88	36	10,010	22,838
Zawyet el Na'oura ... ..	517	163	294	5	28	27	11,001	18,281
Shebin el Kanater ... ..	669	557	31	4	55	19	12,020	20,308
Saff ... ..	446	336	39	9	37	25	12,001	31,891
Ayat ... ..	560	271	212	3	151	23	12,130	24,646



TABLE No. 58 (contd.)

Hospital	In-Patients						Out-Patients	
	Treated during the year	Discharged during the year				Re-maining	New Cases	No. of Visits
		Cured	Re-lieved	Not im-proved	Died			
Etsa ... ..	673	284	285	48	30	26	14,253	21,020
El Wasta ... ..	591	322	117	6	48	28	9,084	15,786
Beba ... ..	518	321	126	6	38	27	11,993	25,388
Beni Mazar ... ..	741	566	64	9	60	36	22,886	43,578
El Fashn ... ..	468	270	142	10	34	12	11,598	25,299
Samallout ... ..	839	316	387	25	73	38	16,814	34,187
Deirout ... ..	771	333	318	25	72	23	16,495	28,674
Badari ... ..	368	257	65	9	22	15	15,010	32,550
Sahel Selim ... ..	272	144	101	1	17	9	10,315	18,730
Abou Tig ... ..	759	437	180	7	101	31	17,521	33,543
Akhmim ... ..	364	225	90	3	36	10	9,589	18,023
Bahana ... ..	252	142	68	2	33	7	16,951	24,801
Girga ... ..	499	348	83	—	51	17	10,141	19,046
Dishna... ..	297	171	102	2	10	6	11,376	17,099
Kous ... ..	290	158	94	2	29	7	16,369	35,058
Nag Hamadi ... ..	479	176	245	—	47	11	15,867	34,052
Kom Ombo ... ..	453	369	32	—	43	9	10,636	14,786
Edfou ... ..	341	245	61	3	24	8	9,423	14,181
Eneiba... ..	53	32	15	—	2	4	1,606	3,226
El-Dirr ... ..	—	—	—	—	—	—	1,608	4,010
<b>TOTAL ... ..</b>	<b>87,326</b>	<b>47,669</b>	<b>27,811</b>	<b>2,511</b>	<b>5,860</b>	<b>3,475</b>	<b>1,749,732</b>	<b>3,256,737</b>

TABLE No. 59.—DEATHS

The Following table shows the number of deaths among in-patients during the last five years and their ratio to patients treated.

Year	No. of In-Patients	No. of Deaths	Percentage
1939... ..	131,068	7,056	5.38
1940... ..	104,475	6,822	6.53
1941... ..	93,029	6,943	7.46
1942... ..	95,587	7,248	7.58
1943... ..	87,326	5,860	6.71

TABLE No. 60.—OPERATIONS AND X-RAY EXAMINATIONS

The Following table shows the number of operations and X-Ray examinations.

Year	In-Patient Operations	Out-Patient Operations	Total	X-Ray Examination
1939... ..	50,115	86,511	136,626	65,591
1940... ..	37,815	80,198	118,013	47,088
1941... ..	30,890	81,781	112,671	30,226
1942... ..	33,007	79,024	112,031	26,746
1943... ..	32,110	71,096	103,206	19,605

# VENEREAL DISEASES

The following Table gives the number of Prostitutes treated in hospitals during 1943.

TABLE No. 61

Gonorrhoea	...	...	...	...	352
Syphilis	...	...	...	...	16
Other diseases	...	...	...	...	—
TOTAL					368

The following Table gives the total number of patients treated for venereal diseases in hospitals during 1943.

TABLE No. 62.

In-Patient Sections			Out-Patient Sections		
Gonorrhœa	Syphilis	Total	Gonorrhœa	Syphilis	Total
219	280	499	1,939	1,627	3,566



## Chapter XI.—OPHTHALMIC HOSPITALS

### *New Units.*

During this year a new ophthalmic branch was provided in Aga General Hospital. This brings the number of ophthalmic units to 94 of which 79 are permanent and 15 travelling.

### *Clinical Work.*

The following table No. 63 shows the clinical work done in 1943 as compared with that of 1942.

TABLE No. 63

	1942	1943 <sup>(1)</sup>
New patients ... ..	1,303,949	1,048,307
In-patients ... ..	32,283	25,460
Operations ... ..	291,611	205,321
Out-patients attendances ... ..	8,110,014	6,086,272

The number of patients who were found blind in one or both eyes, excluding cataract cases causing blindness, was 53185 — i.e. 4 per cent of all patients examined at the ophthalmic hospitals.

By adding the cataract cases causing blindness, the percentage becomes 4.2.

Acute ophthalmias form 82 per cent of all causes of blindness. The gonococcus is still the predominant factor of infection with acute ophthalmias, its ratio to total of microbes being 40 per cent.

### *Age of patients.*

Out of 1048307 new patients treated, 38062, i.e. 8.4 per cent, were under the age of one year; 336871, i.e. 32.13 per cent, between one and 15 years of age; 265019, i.e. 25.29 per cent, between 15 and 30 years of age, and 601890, i.e. 57.42 per cent, between one and 30 years of age. This fact shows that the mass of people recognise the importance of seeking ophthalmic treatment for infants, children and youths.

### *School Clinics.*

Ophthalmic examination, inspection and treatment are, at present, carried out in 36 primary government schools at Cairo and the provinces.

15058 pupils were examined, of whom 98.7 per cent were found suffering from trachoma in its various stages. About 24.73 per cent of these were in the active stages of the disease (trachoma I & II).

As a result of ophthalmic treatment the latter percentage fell to 7.6 per cent.

In this connection it is to be noted that in government schools, the most correct percentage of the prevalence of trachoma among school pupils can be obtained. This is due to the fact that the examination and treatment are carried out in such schools regularly and permanently on pupils who are under the supervision of treating doctors.

<sup>(1)</sup> The decrease is mainly attributed to the precautionary measures adopted against the typhus fever epidemic during this year.

### *Other Services.*

Medical officers of the Ophthalmic Section also visit regularly certain other hospitals and institutions to examine and treat eye cases, e.g.

Leprosy Colony and Hospital at Abu-Zaabal and Syufia.

Mataria Children Dispensary.

Fever Hospitals at Abbassia and Embaba.

Mental Diseases Hospitals at Abbassia and Khanka.

Home for Weanings at Zeitoun.

Preventorium at Zeitoun.

In addition to these services, medical officers of the Ophthalmic Section proceed occasionally to the frontiers districts to examine and treat the inhabitants there for some time every year.

During pilgrimage, the ministry sends a medical mission to Mecca and Medina to examine and treat gratis the pilgrims of all nations and the native inhabitants as well. The medical mission is usually accompanied by ophthalmic doctors for the examination and treatment of eye cases.

### *Accommodation.*

The number of beds in all the ophthalmic units was 2136.

### *Post-graduate course of ophthalmology.*

Of the medical officers of the Ophthalmic Section who attended the preliminary course of ophthalmology 5 were examined in April 1943 and 3 passed; and one in October and he passed.

Of those who attended the secondary course, 4 were examined in May 1943 and three passed; and 4 in November 1943 and 3 passed.

### *Modern apparatus and instruments in ophthalmic hospitals.*

The ministry provides the ophthalmic hospitals as much as possible with modern apparatus and instruments to keep pace with the progress achieved in the ophthalmic field.



## Chapter XII.—PHARMACIES

### *Private Pharmacies :*

Only one new pharmacy was authorised this year. This is owned by a qualified Egyptian Pharmacist as against 11 pharmacies closed down. The total number of existing pharmacies is 483 of which 406 are owned by Egyptians (268 by qualified pharmacists and 138 by non-pharmacists) and 77 are owned by foreign subjects (41 by qualified pharmacists and 36 by non-pharmacists).

### *Pharmacies Annexed to Public Health Offices.*

One of the 13 pharmacies annexed to Public Health offices was abolished during the year leaving 12. These are provided for the purpose of dispensing medicines in localities having no pharmacies.

### *Cairo Night Service Pharmacies.*

There were 4 night service pharmacies in Cairo during 1943 as against 7 in 1942, 3 having been closed down during the year. These dispensed 6252 prescriptions during night service, excluding specialities and patent medicines which are issued without prescriptions,

### *Medical Practitioners who prepare drugs in their clinics for their Private Patients.*

The number of Medical Practitioners who prepare drugs in their clinics for their private patients were as follows :—

Gharbia	5	Giza	2	Behera	3	Menoufia	3
Dakahlia	1	Kaliubia	3	Fayoum	1	Qena	1
Beni Suef	1	Minia	1	Gerga	1		

### *Poisonous Drug Stores.*

No permits for dealing in poisonous substances were granted to drug stores ; 6 permits for trading in agricultural and industrial substances were granted (5 in Cairo and 1 in Gerga) ; and 2 were withdrawn in Cairo. No permits for trading in stupeficient drugs were issued.

### *Simple Drug Stores.*

5 permits were granted by the Ministry for simple drug stores (2 in Menoufia, 2 in Gharbia and 1 in Sharkia) ; and 2 were cancelled in Gharbia.

### *Registration of Egyptian Specialities.*

During the year, 213 permits for the preparation and sale of Egyptian specialities were granted and 40 specialities were refused registration. 133 permits are held up until the announcement of their prices by producers. This brings the total number of registered specialities to 1033.

### *Students of Pharmacy.*

During 1943, 64 students of the Egyptian School of Pharmacy and 2 of Foreign schools were authorised by the Ministry to pass the statutory period of training in pharmacies, as against 58 and 4 respectively in the previous year.

*Violation of the Law.*

159 cases of contravention were brought before the courts by the Ministry. Of these, 64 were for trading in poisonous drugs without permits, 23 for practising pharmacy without authorisation and 72 against pharmacists and assistant pharmacists for violating the law.

*Pharmaceutical Preparations.*

4 Laboratories (3 in Cairo and 1 in Alexandria) were authorised in 1943 to manufacture pharmaceutical preparations.

TABLE No. 64 SHOWING QUANTITIES OF STUPEFACIENTS IMPORTED INTO EGYPT AND EXPORTED THEREFROM DURING 1943

Name of Drug	Quantities Imported		Quantities Exported	
	Kg.	Gr.	Kg.	Gr.
Opium and its preparations ... ..	6	425	—	—
Morphine and its salts ... ..	1	284	—	—
Eucodal and its salts ... ..	—	—	—	—
Cocaine and its salts ... ..	—	400	—	—
Cannabis Indica (tinct. and ext.) ... ..	—	210	—	—

QUANTITIES OF STUPEFACIENTS CONFISCATED FOR ILLICIT IMPORT AND EXPORT

	Kilo
Opium ... ..	665
Cannabis Indica ... ..	2036
Heroin ... ..	1

QUANTITIES OF STUPEFACIENTS CONSUMED FOR MEDICINAL PURPOSES

	Kilo
Opium and its preparations ...	6
Morphine and its salts ... ..	1
Cocaine and its salts ... ..	1
Cannabis Indica ... ..	9



## Part IV.—ENDEMIC DISEASES

### Chapter XIII.—BILHARZIA AND ANCYLOSTOMA

#### *New Units.*

During this year, four new Ancylostoma and Bilharzia units were inaugurated :

- 1.—At Dikernis District Hospital inaugurated on October 20, 1943.
- 2.—At Kafr-el-Dawar District Hospital inaugurated on November 1, 1943.
- 3.—Traveling Hospital (No. 41) inaugurated on December 5, 1943 at Delingat.
- 4.—Endemic and Medical Diseases Hospital inaugurated on December 15, 1943 at Tewfikieh (Behera).

This brings the total number of all Bilharzia and Ancylostoma units up to 94 of which 7 are stationary, 44 traveling, 27 branches in District Hospitals and 16 School Clinics.

#### *Units Transferred from Provincial Councils .*

According to the decision of the Council of Ministers of May 16, 1943, regarding the transfer of treatment units of Provincial Councils to The Ministry of Public Health, the following units were transferred to this Section as from May 1, 1943.

- 1.—The Trav. Anc. and Bilh. Hosp. of Qena P.C. at Farshout (No. 36).
- 2.— „ „ „ „ Giza P.C. at Hawamdieh (No. 37).
- 3.— „ „ „ „ Dakahlia P.C. at El Sirw (No. 38).
- 4.— „ „ „ „ Kaliubia P.C. at Toukh (No. 39).
- 5.— „ „ „ „ Sharkia P.C. at Anshas (No. 40).
- 6.— „ „ „ „ Menoufia P.C. at Menouf was regarded as an Anc. and Bilh. Branch of Menouf District Hospital.

#### *Number of Patients treated.*

In the following table, the number of new patients, injections and anthelmintic doses given are shown as compared with the corresponding numbers of the previous year (1942)

	1942	1943
Number of New patients ... ..	988,081	1,052,474
Number of new infections ... ..	3,650,077	3,527,622
Anthelmintic doses ... ..	448,534	450,088

#### *Treatment of Pupils.*

Pupils examined ... ..	—	31961
Anti-bilharzia injections administered...	—	51720
Anthelmintic doses given ... ..	—	6628

#### *Treatment of Territorial Force.*

4694 men were examined this year as against 8678 examined during the previous year.

### *Units Undertaking Treatment in Neighbouring Localities.*

During certain months of the year, work in Bilharzia and Ancylostoma units become so little that these are able to undertake, in addition, treatment in neighbouring localities without interruption of their original work. For instance, the Bilharzia and Ancylostoma unit at Shebin el Kanater was able to treat 1432 workers of Gebel el Asfar Sewage farm during this year. These received a total of 6204 injections and 1692 anthelmintic doses.

In the same way, treatment was extended to students of El Azhar and Fouad I Universities as well as to residents in the Agouza home for waifs, Pont Lemon Club and other similar institutions.

### *Providing Hospitals with In-patient Sections.*

Great strides have been made towards providing in-patient sections in Bilharzia and Ancylostoma units for the accommodation of patients coming from distant villages and thus spare them the trouble of travelling long distances, particularly weak and anæmic patients.

A new hospital for medical and endemic diseases with a 20 bed in-patient section was opened on December 15, 1943, at Tewfikieh (Behera Province). A 10-bed in-patient section is being provided in Tanta Bilharzia and Ancylostoma Hospital and another with an accommodation of 6 beds in the Bilharzia and Ancylostoma hospital No. 34 in Minia. Further in-patient sections will be provided in other hospitals as funds become available.

### *Providing accommodation for Endemic Diseases cases in District and General Hospitals.*

Four beds have been reserved in each of the following district and general hospitals for the treatment of endemic diseases: Aga, Menouf, Dekernis, Ayat, Rosetta, Damietta. Port-Said, Kaliub, Mansoura, Zagazig, Shebin El Kom and Assiut.

Whenever this is possible, four beds will be reserved for the same purpose in each of the remaining district and general hospitals.

### *Cooperation of Ancylostoma and Bilharzia Units and General or District Hospitals.*

As the preliminary treatment of parasitic infections in medical diseases cases is of paramount importance, it was decided that out-patients attending district or general hospitals provided with Ancylostoma and Bilharzia branches should first be examined and treated for parasitic infections, after which they would be treated for medical diseases.

### *Treatment of Medical Diseases and Out Patients by Anc. and Bil. Units.*

A new procedure was tried in July 1942 whereby (1) Anc. Units not annexed to general hospitals in Behera Province were authorised to treat such medical diseases as their in-patients might be suffering from, and (2) Anc. Branches in district and general hospitals were authorised to undertake out-patient treatment. Some 3181 cases of the former and 5062 of the latter were treated during the year. The result proved satisfactory in that the attendance increased and the patients showed more desire for treatment.

### *Treatment of Malaria.*

In order to save the time lost in forwarding blood films to Fouad 1st Institute for Tropical Diseases in Cairo for examination and to expedite treatment of malaria, laboratory assistants in certain Anc. Units now undertake the examination of blood films for malaria having been trained in this work. It is proposed to train laboratory assistants in the remaining Units in this work.



### *Treatment of Pellagra.*

Of a total of 11265 pellagra cases examined during the year, 3997 cases received treatment as compared with 24691 cases examined and 16313 cases treated in the previous year.

Lack of yeast powder led the Ministry to try other substances. Certain units are now experimenting with dried dates and dried Moloukhia in the treatment of pellagra

### *Cases of Poisoning.*

Cases of poisoning recorded during the year were 3 with tartar emetic, all fatal, and 4 with Carbon tetrachloride one of which was fatal.

### *Compulsory Treatment of Bilharzia in Fayoum Province.*

Now that the clearance of water channels in Fayoum Province which was undertaken by the Snail Eradication Section is complete, a ministerial arrêté was issued applying the Bilharzia Control Law No. 58 of 1941 to the whole province. Under this law, treatment of bilharzia is now compulsory throughout the province; the following Units having been engaged in the treatment campaign :—

1.—Travelling Anc. and Bilh. Units Nos. 4 in Fayoum, 14 in Sinnouris, 19 in Shawashna, 25 in El Gharak El Sultani and 38 in Ezbet Abou Glayel.

2.—Travelling Anc. and Bilh. Clinics Nos. 4 in Tattoun, 7 in Lahoun, 11 in Sanhour, 14 in Edwa and 15 in Abshaway

3.—Anc. and Bilh. Branch in Etsa District Hospital.

The treatment Campaign had to be reviewed in July 1943 and it was finally decided to adopt the procedure of concentrating treatment in one locality.

Herebelow is a statement of the work accomplished during 1943:—

1.—	Number of	new patients	...	...	...	...	...	107,490
2.—	„	bilharzia cases	...	...	...	...	...	43,164
3.—	„	patients commencing treatment	...	...				32,397
4.—	„	„ completing treatment	...	...				31,713
5.—	„	„ cured	...	...	...	...	...	21,605
6.—	„	„ injections given	...	...	...			388,202

## Chapter XIV.—MALARIA

The general ratio of positive malaria cases to blood specimens examined rose from 8.9 % in the previous year to 16.9 % this year. The greater part of the cases was recorded in Upper Egypt where the ratio was 11.6 % as against 4.3 last year. The ratio for Lower Egypt was 18.1 % as against 10.3 % in the previous year.

All the 10 permanent malaria stations continued to operate as usual with the exception of the Giza Station which had to be annexed to the Gambia Eradication Section. The six travelling hospitals also remained the same with the exception of No. 4 travelling hospital which was transferred from Kafr Abu Nasir to Dekernis.

Table No. 65 shows the movements of the malaria outposts during the year. The quantities of drugs distributed by these units were greater in proportion to the increase of patients than in the previous year. Table 81 gives the quantities distributed of each drug.

### II.—*Malaria Units.*

No new Malaria units, permanent or travelling, were created this year. Table 65 gives the distribution of the existing units.

### III.—*Blood Specimens & Results thereof.*

Of a total of 113,005 blood specimens examined this year in Lower and Upper Egypt, 19,057 or 16.9 per cent were returned positive for Malaria (New infection and relapses). Tables 66, 67 and 68, give the distribution of these cases according to the three categories of patients namely, (1) Attendances at Malaria units, (2) Suspected patients, and (3) Patients undergoing general examination, in both Lower and Upper Egypt. The ratio of positive results was highest in the first category as patients were either suffering from Malaria symptoms or a rise in temperature.

Besides the above, the Endemic Diseases Research Institute and Hospital examined a number of blood specimens for Malaria forwarded from different localities. Table 69 gives these localities and the results of the specimens.

### IV.—*New Malaria Infections & Relapses.*

Of a total of 19,057 Positive cases, 4565 or 24 per cent were new infections. The remainder were relapses as per Table No. 68.

### V.—*Age distribution of Malaria cases.*

Table 70 gives the age distribution of positive cases. Positive cases amongst infants are generally considered as new infections hence the ratio in this age group is lower than in other age groups which are susceptible to relapses.

### VI.—*Types of Malaria.*

Table 71 shows the incidence of the various types of Malaria and ratio in Lower Egypt, the Suez Canal, and Suez Governorates and in Upper Egypt, the Western and Southern Desert Governorates.



## VII.—*Monthly Distribution of Malaria.*

Tables 72 and 73 give the monthly distribution of all types of malaria in Lower Egypt, Suez Canal & Suez Governorates and in Upper Egypt, the Western and Southern Desert Governorates. The incidence of benign malaria reached its peak in Lower Egypt during July to October, the malignant type reached its peak in the beginning and end of the year.

## VIII.—*Malaria Cases & Deaths notified in the Governorates & Provinces during 1942–1943.*

Perusal of Table 74 shows that whereas the incidence of malaria was 3,407 cases less than in the previous year, there were 947 more deaths. This is attributed to the Gambia infection in Qena and Aswan Provinces.

## IX.—*Malaria and Spleen Index.*

No further research was made in respect of spleen-index, sufficient data having been compiled in previous years.

## X.—*Mosquito Breeding Places.*

The detection and control of mosquito breeding places were carried out on the same lines as in previous years. Dangerous breeding places were given first priority and were reported to the competent authorities for immediate extermination.

Tables 75 and 76 give details of the work carried out by the various units.

## XI.—*Control Measures.*

The same temporary and permanent control measure were adopted as in previous years. A total of 81.750 kilogrammes of Paris Green and 113.652 tons of mazut were used for the purpose during the year ; (see table No. 77).

As usual, the Department of Village Affairs undertook the permanent control measures which cost L.E. 41,507.600 during 1942–1943 and L.E. 17,596.830 during 1943–1944. 57 birkas with a total surface area of 89 f. 4 k. 23 s. were filled in during the first year and 40 birkas with a total surface area of 30 f. 0 k. 1 s. were filled in the second. (Vide tables 78 and 79).

## XII.—*Filariasis (Elephantiasis).*

Of a total of 226 blood specimens received by Fouad El Awal Institute and Hospital for Endemic Diseases from Fareskour area, 30 were returned positive. No other research work was carried elsewhere.

## XIII.—*Drugs and Treatment.*

Drugs were issued to patients who had been examined microscopically. Table No. 81 gives the quantities of drugs distributed during the year in Lower Egypt and in the localities remaining under the control of the Malaria Section (*i.e.* other than provinces controlled by the Gambia Eradication Section).

## MILITARY ORDERS AND MINISTERIAL ARRÊTÉS

### *Military Orders.*

A.—In order to exterminate mosquito breeding places in both Lower and Upper Egypt, the Ministry had issued two decrees, namely No. 1 of 1926 prescribing anti malaria measures; and No. 103 of 1939 providing for the filling in of birkas and prohibiting the formation of burrow pits. As these measures proved ineffective and in view of the appearance in Upper Egypt of the Gambia mosquito, Military Order No. 363 of 1943 was published on January 21, 1943. According to this order, owners of birkas were required to fill them in within three months if under half a feddan in area, or within six months if over. By this means, it was possible to fill in a total area of 2000 feddans of birkas or one fifth of the total birkas in Egypt. The remaining breeding places were either owned or temporarily requisitioned by the Government for filling in purposes and later debiting owners with the costs, as per provisions of the order.

B.—As a further control measure against the malaria borne mosquito—the Gambia mosquito in particular—Military Order No. 395 of 1943 was published on April 21, 1943, prohibiting rice cultivation in all Upper Egypt provinces, except Fayoum Province, and regulating the irrigation and drainage of rice cultivations in certain localities.

C.—A third Military Order No. 396 was published on May 5, 1943, restricting rice cultivated areas where this was permitted and providing that these must be thoroughly dried between irrigation rotations.

### *Ministerial Arrêtés.*

Only one Ministerial Arrêté prohibiting rice, rush and panicle cultivation in the vicinity of Kafr el Dawar Pumping Station, Behera Province, was issued in connection with Military Order No. 115 of 1941 dealing with anti malaria measures in localities where troops were garrisoned.



TABLE No. 65

Provinces	Permanent Stations	H.Q. & No of the Travel- ling Hospitals	Malaria Outposts
<i>A.—Lower Egypt.</i>			
Behera... ..	{Edku ... .. Kafr el Dawar ...	Kafr el Dawar 3 ... (Not yet opened) ...	El Montazah, El Nazlia, Khorshed.
Dakahlia ... ..	—	Dekernes (4) ... ..	Serw Kafr Abu Nassir, El Mansoura.
Gharbia ... ..	{Fowa ... .. Kafr el Sheikh ...	{Desouk (5) ... ..	{Biala-Kallin.
Sharkia ... ..	—	Belbeis (2) ... ..	Tel El Kcbir Farcugia, El Faridia.
Canal ... ..	Ismailia ... ..	—	{Abu Sweir, Nefisha, Sarabium, Abu Sultan.
Suez ... ..	Suez ... ..	—	Kubri Shallufa.
Kaliubia ... ..	—	Toukh (6) ... ..	Inshaw-Hermiel.
<i>B.—Upper Egypt.</i>			
Giza ... ..	Giza ... ..	—	{Kafr Ghatati. (It was decided to attach it to the Gambia Section.
Fayoum ... ..	{Fayoum ... .. Wadi El Natroun ...	Abshaway 1 ... .. Wadi El Natroun ...	—
Frontier Governorates	—	—	Baharia Oasis, {Dakli and Kharga Oases.

TABLE No. 66.—SHOWING BLOOD SPECIMENS TAKEN FROM LOWER EGYPT AND THE CANAL  
AND SUEZ GOVERNORATES DURING 1943 AND RESULTS OF EXAMINATION.

Category	No. of Specimens	Positive			
		New	Relapses	Total	%
(1) Attendance at Malaria Stations and their Branches... ..	39,965	3,599	10,056	13,658	34.4
(2) Suspected persons in their residence...	13,795	633	964	1,597	11.5
(3) Persons under general examination ...	37,561	213	1,068	1,281	3.4
<b>GRAND TOTAL ... ..</b>	<b>91,321</b>	<b>4,445</b>	<b>12,088</b>	<b>16,533</b>	<b>18.1</b>

**TABLE No. 67.—SHOWING BLOOD SPECIMENS TAKEN FROM UPPER EGYPT AND SOUTHERN AND WESTERN DESERT GOVERNORATES DURING 1943 AND RESULTS OF EXAMINATION.**

Category	No. of Specimens	Positive			
		New	Relapses	Total	%
(1) Attendance at Malaria Stations and their Branches ... ..	2,749	31	614	645	23·4
(2) Suspected persons in their residence ...	3,049	15	88	103	3·3
(3) Persons under general examination ...	15,886	74	1,702	1,776	11·3
<b>GRAND TOTAL ... ..</b>	<b>21,684</b>	<b>120</b>	<b>2,404</b>	<b>1,524</b>	<b>11,6</b>

**TABLE No. 68.—SHOWING BLOOD SPECIMENS TAKEN FROM THE WHOLE OF EGYPT (LOWER AND UPPER EGYPT, CANAL, AND FRONTIERS DISTRICTS).**

Category	No. of Specimens	Positive			
		New	Relapses	Total	%
(1) Attendance at Malaria Stations and their Branches... ..	42,714	3,630	10,670	14,300	33·4 %
(2) Suspected persons in their residence ...	16,844	648	10,524	1,700	10·09%
(3) Persons under general examination ...	53,447	287	2,770	3,057	5·6 %
<b>GRAND TOTAL ... ..</b>	<b>113,005</b>	<b>4,565</b>	<b>14,492</b>	<b>19,057</b>	<b>16·9</b>

**TABLE No. 69.—SHOWING NO OF SPECIMENS EXAMINED FOR MALARIA BY THE RESEARCH INSTITUTE DURING 1943 AND RESULTS.**

Districts sending specimens	No. of specimens	Positive	Districts sending specimens	No. of specimens	Positive
Aswan ... ..	1 117	515	<i>Brought Forward</i> ... ..	9,504	3437
Qena ... ..	1,931	874	Boulac Unit (Cairo) ...	2	—
Girga ... ..	2,771	1,576	Canal ... ..	257	69
Assiut ... ..	219	—	Ismailia ... ..	1,627	241
Fayoum ... ..	2,001	189	Alexandria ... ..	52	—
Kharga Oasis ... ..	348	56	The hospitals ... ..	2,746	948
Dakhla ,, ... ..	205	46	Anclystoma Units ... ..	9	6
Behera... ..	574	88	Malaria Section ... ..	4	4
Gharbia ... ..	338	93	Research Institute ... ..	662	127
Dakahlia ... ..	413	—			
<i>Carried forward</i>	<b>9,917</b>	<b>3,437</b>	<b>GRAND TOTAL ... ..</b>	<b>14,863</b>	<b>4,832</b>



TABLE No. 70.—SHOWING AGE DISTRIBUTION OF MALARIA CASES IN LOWER EGYPT, THE CANAL AND SUEZ GOVERNORATES AND IN UPPER EGYPT AND THE SOUTHERN AND WESTERN DESERT GOVERNORATES DURING 1943.

Region	Children under 1 year			From 1 to 15 years			From 16 to 36 years			Above 36 years		
	No. of Specimens	Positive	Ratio %	No. of Specimens	Positive	Ratio %	No. of Specimens	Positive	Ratio %	No. of Specimens	Positive	Ratio %
Behera ... ..	594	68	10.2	8,702	1,484	1.7	4,270	1,285	30.04	1663	421	25.3
Gharbia ... ..	941	157	16.6	157	1,594	2.8	5,400	1,810	32.4	2,183	577	24.3
Dakahlia ... ..	406	28	6.9	6,996	960	1.3	3,828	841	21.9	1,169	308	26.3
Sharkia ... ..	800	26	3.2	2,312	633	27.3	3,917	789	20.1	250	111	44.4
Canal ... ..	429	10	2.33	3,960	334	8.4	2,875	374	13.008	1,359	108	7.8
Suez... ..	1,092	2	.18	6,312	124	1.9	115	131	3.1	2214	37	1.6
Kalubia ... ..	2,251	225	9.9	6490	1,627	39.3	8,528	1,380	16.1	3,108	1,089	3.03
TOTAL ... ..	6,513	516	7.9	39,929	6,756	16.6	32,933	6,610	19.8	11,946	2,651	21.8
Fayoum ... ..	43	1	2.3	6,401	431	6.7	2,141	154	7.1	1,488	141	9.4
Wadi El Natroun...	72	—	1.3	430	37	8.6	475	53	11.1	97	20	21.05
Southern Desert ... ..	790	39	4.9	2,530	321	12.6	4,230	640	15.1	2,989	381	12.7
TOTAL ... ..	905	40	4.4	9,361	789	8.4	6,846	847	12.3	4,572	542	11.8

TABLE 71.—SHOWING NO. OF CASES ACCORDING TO MALARIA SPECIES IN LOWER EGYPT AND THE CANAL AND SUEZ GOVERNORATES  
AND IN UPPER EGYPT AND THE SOUTHERN AND WESTERN DESERT GOVERNORATES DURING 1943

Provinces or Governorate	Total of specimens	Total posit. cases	Ratio %	Benign Tertian				Malignant Tertian				Quartan Malaria			
				No.	New	Relapses	Ratio to post.	No.	New	Relapses	Ratio to post	No.	new	Relapses	%
Behera...	15,229	3,258	21.3	2,528	421	2,107	77.5	730	321	409	22.4	—	—	—	—
Gharbia	13,681	4,138	30.2	2,766	1,034	2,032	66.8	1,372	827	545	33.1	—	—	—	—
Dakahlia	12,399	2,137	17.2	1,905	37	1,868	89.1	232	15	217	10.8	—	—	—	—
Sharkia	7,279	1,559	21.4	588	258	330	37.7	971	432	539	62.2	—	—	—	—
Canal ...	8,623	826	9.5	321	192	129	38.8	505	232	273	61.1	—	—	—	—
Suez ...	13,733	294	2.1	75	2	73	25.4	219	—	219	74.4	—	—	—	—
Kaliubia	20,377	4,321	21.2	3,243	344	2,899	75.05	1,078	330	748	24.9	—	—	—	—
TOTAL ... ..	91,321	16,533	18.1	11,426	2,288	9,138	18.5	5,107	2,157	2,950	30.8	—	—	—	—
Fayoum ... ..	10,073	727	7.2	396	34	362	54.4	330	24	306	45.3	1	—	1	0.1
Wadi El Natroun	1,072	110	10.2	75	9	66	68.1	35	8	27	31.8	—	—	—	—
Southern Desert	10,539	1,680	15.9	638	11	827	37.6	1,042	20	1,022	82.02	—	—	—	—
TOTAL ... ..	21,684	2,517	11.6	1,109	54	1,055	41.9	1,407	52	1,355	55.8	1	—	1	0.03



TABLE No. 72.—SHOWING MONTHLY DISTRIBUTION OF MALARIA CASES ACCORDING TO SPECIES IN LOWER EGYPT AND THE CANAL AND SUEZ GOVERNORATES DURING 1943

Month	Total of Specimens	Total of Positive Cases	%	Benign Malaria				Malignant Malaria				Quartan Malaria			
				No.	New	Relapses	%	No.	New	Relapses	%	No.	New	Relapses	%
January ... ..	8,841	1,243	—	698	25	673	7·8	515	332	213	6·1	—	—	—	—
February ... ..	7,894	681	—	206	26	180	2·6	475	324	151	6·02	—	—	—	—
March ... ..	7,262	927	—	287	51	236	3·9	640	308	332	8·8	—	—	—	—
April ... ..	5,350	842	—	470	92	378	8·7	372	298	74	6·9	—	—	—	—
May ... ..	6,341	1,206	—	974	190	784	15·3	233	90	142	6·3	—	—	—	—
June ... ..	8,193	1,320	—	1,106	173	933	13·4	214	79	136	2·6	—	—	—	—
July ... ..	6,517	1,679	—	1,397	194	1,203	21·4	282	67	235	4·3	—	—	—	—
August ... ..	7,338	1,538	—	1,348	299	1,049	18·3	240	62	178	3·2	—	—	—	—
September ... ..	8,488	2,008	—	1,673	392	1,281	19·7	335	60	275	3·9	—	—	—	—
October ... ..	8,792	2,035	—	1,694	455	1,069	17·2	511	132	379	5·8	—	—	—	—
November ... ..	9,906	1,848	—	1,300	307	993	13·1	548	177	371	5·5	—	—	—	—
December ... ..	6,399	1,156	—	568	104	464	8·8	588	208	386	9·1	—	—	—	—
TOTAL ... ..	91,321	16,533	18·1	11,551	2,308	9,243	12·3	4,982	2,137	2,845	5·4	—	—	—	—

TABLE No. 73.—SHOWING MONTHLY DISTRIBUTION OF MALARIA CASES IN UPPER EGYPT AND THE SOUTHERN AND WESTERN DESERT GOVERNORATES DURING 1943

MONTH	Total of Specimens	Total of Positive Cases	%	BENIGN MALARIA				MALIGNANT MALARIA				QUARTAN MALARIA			
				No.	New	Relapses	%	No.	New	Relapses	%	No.	New	Relapses	%
January ... ..	2,227	164	7.36	84	6	78	51.2	80	3	77	48.7	—	—	—	—
February ... ..	1,440	137	0.5	94	2	92	68.6	42	1	41	36.5	1	—	1	0.72
March ... ..	1,360	131	9.6	79	3	76	60.3	52	2	50	39.6	—	—	—	—
April ... ..	1,328	165	12.4	99	2	97	60.	66	—	66	40	—	—	—	—
May ... ..	1,487	115	7.7	61	5	56	53	54	—	54	46.9	—	—	—	—
June ... ..	1,422	145	10.19	62	5	57	42.7	83	3	80	57.2	—	—	—	—
July ... ..	1,102	93	8.4	45	7	38	48.3	48	4	44	51.6	—	—	—	—
August ... ..	1,893	201	10.6	97	8	89	48.2	104	11	93	51.4	—	—	—	—
September ... ..	914	84	9.19	44	9	35	52.3	40	3	37	47.6	—	—	—	—
October ... ..	1,587	184	11.6	96	8	88	52.1	88	10	78	47.8	—	—	—	—
November ... ..	1,979	256	12.9	111	2	109	43.3	145	1	144	56.6	—	—	—	—
December ... ..	2,749	551	20.	280	1	279	50.8	271	5	266	49.1	—	—	—	—
TOTAL ... ..	19,488	2,226	11.6	1,152	58	1,094	51.7	1,073	43	1,030	48.2	1	—	1	0.72



TABLE No. 74.—NUMBER OF MALARIA CASES AND DEATHS NOTIFIED  
DURING THE YEARS 1942 AND 1943

GOVERNORATE OR PROVINCE	1942		1943		Difference	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Cairo ... ..	601	41	575	30	— 26	+ 16
Alexandria ... ..	1,933	10	991	25	— 942	+ 15
Ismailia ... ..	759	10	440	6	— 319	— 4
Port-Said... ..	160	2	149	1	— 11	— 1
Suez... ..	287	13	471	39	+ 184	+ 26
Dametta ... ..	17	—	22	—	+ 5	—
Sinai and The Red Sea ...	54	—	28	—	— 26	—
Southern Desert ... ..	400	—	246	1	— 154	+ 1
Western „ ... ..	8	—	12	—	+ 4	—
Behera ... ..	1,191	4	713	3	— 478	— 1
Dakahlia ... ..	134	2	60	—	— 74	— 2
Gharbia ... ..	264	4	223	4	— 11	—
Menoufia ... ..	57	—	47	1	— 10	— 1
Kaliubia ... ..	1,738	—	1,395	—	— 343	—
Sharkia ... ..	447	1	519	3	+ 72	+ 2
Giza ... ..	92	—	96	2	+ 4	+ 2
Fayoum ... ..	1,297	7	793	1	— 504	— 6
Beni-Suef ... ..	72	5	75	3	— 3	— 2
Minia ... ..	48	1	95	1	+ 47	—
Assiut ... ..	185	1	252	2	+ 67	+ 1
Girga ... ..	1,879	11	214	6	— 1,660	— 5
Qena ... ..	1,095	24	5,461	660	+ 4,366	+ 636
Aswan ... ..	7,219	285	3,633	553	— 3,566	+ 268
<b>TOTAL ... ..</b>	<b>19,937</b>	<b>394</b>	<b>16,530</b>	<b>1,341</b>	<b>— 3,407</b>	<b>+ 947</b>

N.B.—The large increase of cases in the Southern Provinces is mainly due to the prevalence of Gambia mosquito during 1942.

TABLE No.75.—SHOWING VILLAGES INSPECTED AND NO. OF BIRKAS HARBOURING EITHER LARVAE OF ANOPHELES, CULEX PAPIENS OR BILHARSIAL SNAILS IN LOWER EGYPT AND CANAL ZONE AND IN UPPER EGYPT AND THE OASES.

Province or Governorate	Station	No. of Villages Inspected	No. of Birkas examined	Birkas free of larvae		Birkas harbouring Anopheles Larvae								Birkas harb. Bilharz. Snails		Birkas harbour Culex-Papiens		
				No.	%	Pharoen.		Multicolor		Sergenti		Other Species		No.	%	No.	%	
						No.	%	No.	%	No.	%	No.	%					No.
Behera...	{ Idku ... .. Kafr el Dawar ... ..	— 2	— 3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
				3	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gharbia ... ..	{ Fawa ... .. Kafr el Sheikh ... .. Biala ... ..	— 4	— 9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
				—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
				6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dakahlia ... ..	{ Faraskour ... .. Dekernis ... ..	8 9	8 27	6	—	2	—	—	—	—	—	—	—	—	—	—	—	
				17	—	10	—	—	—	—	—	—	—	—	—	—	—	—
Sharkia ... ..	Belbeis and its Branches ... ..	14	22	12	—	10	—	8	—	1	—	5	—	6	—	—	—	
Canal ... ..	Ismailia and its Branches ... ..	6	292	21	—	113	—	62	—	41	—	68	—	258	—	—	—	
Suez ... ..	Suez ... ..	3	78	67	—	1	—	9	—	—	—	1	—	—	—	—	—	
Kaliubia ... ..	Toukh ... ..	16	40	17	—	8	—	10	—	—	—	—	—	11	—	—	—	
TOTAL ... ..		62	479	149	31.1	144	30.6	89	18.5	42	—	74	15.2	278	58	—	—	
Fayoum ... ..	{ Fayoum ... .. Abshaway ... ..	13 2	30 2	7	—	19	—	17	—	4	—	—	—	1	—	—	—	
				—	—	1	—	—	—	1	—	—	—	—	—	—	—	—
				—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ... ..		15	32	7	9.7	20	27.7	17	23.6	5	—	—	—	1	1.3	—	—	



TABLE No. 76.—SHOWING No. OF INSPECTIONS OF MOSQUITO BREEDING PLACES IN LOWER EGYPT AND CANAL ZONE AND IN UPPER EGYPT AND THE SOUTHERN AND WESTERN DESERT GOVERNORATES DURING 1943.

PROVINCE OR GOVERNORATE	Unit	Burrow-Pits	Railway Ditches	Unburnt Brick Paddles	Wells and Sakias	Drains	Canals & Irrigation Water courses	Ponds	Marshes	Rice Cultivation	Sugar Cane Cultivation	Samar Cultivation	Lakes
Behera...  Gharbia  Dakahlia Sharkia Canal ...  Suez ... Kaliubia	Idku ...	655	—	—	—	4,160	2,082	—	141	129	—	—	564
	Kafr el Dawar ...	35	35	—	—	264	5	4	—	5	—	—	—
	Fowa ...	—	—	—	—	—	—	—	—	—	—	—	—
	Kafr el Sheikh ...	—	—	—	—	—	—	—	—	—	—	—	—
	Biala ...	—	8	—	8	—	1	—	—	—	—	—	—
	Faraskour	—	—	—	215	842	65	84	—	230	—	—	—
	Dekernis ...	—	94	—	—	514	74	711	204	129	—	—	—
	Belbeis	—	—	—	—	202	—	170	—	—	—	—	—
	Sarabium	—	48	—	—	660	—	185	12	—	—	—	—
	Ismailia	8	—	—	—	50	8	7	2	15	—	—	—
TOTAL	Dabia ...	5	—	—	—	147	26	336	38	—	—	—	—
	Suez ...	103	98	—	—	6,345	208	319	—	—	—	—	—
	Toukh ...	70	—	—	—	—	—	677	143	—	—	—	—
		876	283	—	223	12,824	2,469	2,493	540	508	—	—	564
Fayoum	Fayoum ...	—	294	71	—	693	509	564	—	—	—	—	—
	Abshaway ...	—	—	—	—	64	—	2	—	—	—	—	—
TOTAL		—	294	71	—	737	509	566	—	—	—	—	—

TABLE NO. 77.—SHOWING QUANTITIES OF PARIS GREEN AND  
MAZUT CONSUMED DURING THE YEAR 1943

District	Province or Governorate	Station	Paris Green in Kilograms	Mazut in Tons.	
Lower Egypt and Canal Zone:	Behera ...	{ Idkou ... ..	0·500	8·350	
		{ Kafr el Dawar ...	—	5·959	
	Gharbia ...	{ Fawa ... ..	3·500	—	
		{ Kafr El Sheikh...	5·750	2·170	
		{ Biala ... ..	—	—	
	Dakahlia ...	{ Faraskour ... ..	—	12·261	
		{ Dekernis ... ..	—	258	
	Sharkia ... ..	Belbeis ... ..	20	3·005	
	Canal ... ..	Ismailia ... ..	5	3·620	
	Suez ... ..	Suez ... ..	—	51·599	
	Kaliubia ...	{ Toukh ... ..	4·000	1·380	
		{ Anshas ... ..	3·000	300	
TOTAL ... ..			41·750	88·902	
Upper Egypt and Frontiers Districts:	Fayoum ...	{ Fayoum ... ..	9·000	8·000	
		{ Abshaway ... ..	11	6·640	
	Baharia Oasis ...	—	—	10·000	
	Dakhla Oasis ...	—	15	·110	
	Kharga Oasis ...	—	5	—	
	TOTAL ... ..			40·—	24·750
	GRAND TOTAL ...			81·750	113·652



TABLE No. 78.—SHOWING BIRKAS FILLED IN DURING THE FISCAL YEAR 1942-1943.

Province	Markaz	No. of Birkas	Total Area			Vol. of soil in C. Metres	Total Cost	
			F.	K.	S.		L.E.	Mill.
Behera	Kom Hamada ...	1	—	20	9	3,154	449	445
	Damanhour ...	1	6	10	18	36,839	2,694	773
	TOTAL ...	2	7	7	3	39,993	3,144	218
Gharbia	Samannoud ...	5	10	19	22	42,234	5,781	594
	Kafr El Sheikh ...	4	18	9	15	53,648	7,743	859
	Biala ...	5	—	15	8	3,111	301	980
	TOTAL ...	14	29	20	21	198,993	13,917	439
Menoufia	Shebin el Kom ...	1	1	19	2	17,709	1,947	990
	Quesna ...	2	1	5	—	6,053	423	710
	TOTAL ...	3	3	—	2	23,762	2,371	700
Dakahlia	Dekernis ...	5	10	14	19	27,242	2,179	360
	El Senbellawin ...	3	8	21	7	23,433	2,343	300
	TOTAL ...	8	19	12	2	50,675	4,522	660
Sharkia	Belbies ...	5	1	17	10	7,413	1,056	824
	Min <sup>e</sup> el K <sup>m</sup> h ...	2	2	—	23	9,610	1,520	291
	Hehya ...	1	—	5	12	477	46	269
	Kafr Sakr ...	1	3	4	—	9,441	1,556	821
	TOTAL ...	9	7	3	21	26,941	4,180	205
Kaliubia	Benha ...	6	5	4	21	31,181	3,951	364
	Toukh ...	1	1	5	6	6,824	553	280
	Shebin el Kanatir ...	3	3	9	22	15,193	2,000	609
	Kaliub ...	3	1	15	11	10,428	1,111	304
	TOTAL ...	13	11	11	12	63,626	7,637	117
Giza	Giza ...	5	7	12	23	53,108	4,606	403
Fayoum	Fayoum ...	3	3	3	11	16,170	1,127	858
GRAND TOTAL ...		57	89	4	23	472,268	41,507	600

TABLE No. 79.—SHOWING BIRKAS FILLED IN DURING THE FISCAL YEAR 1943-1944 BY  
THE VILLAGE AFFAIRS DEPARTMENT.

Debited	No of Birkas	Total Area			Total cost		Remarks
		F.	K,	S:	L.E.	Millim	
1.— <i>Debited against supplementary funds of malaria section.</i>							
Filling in birkas at Tahanoub village, Sh·bin el Kanatir District, Kaliubia Province ...	4	3	22	16	3,358	675	
Filling in Birkas at Ballana vil- lage, Eneiba District, Aswan Province ... ..	13	16	4	16	3,880	730	
Filling in Birkas at Eklit and Mansouria District, Aswan Province ... ..	15	4	3	17	1,536	—	
TOTAL ... ..	32	24	7	1	8,775	405	
2.— <i>Debited against Kaliubia Pro- vincial Council Accounts.</i>							
Filling in Birkas at Tahanoub vill. Shebin el Kanatir District, Kaliubia Province ... ..	2	2	2	—	3,557	785	
3.— <i>Debited against Girga Pro- vincial Council Accounts.</i>							
Filling in Birka at Manshaa. Girga District. ... ..	3	2	18	—	3,442	810	
Filling in Birka at Nagah el Ting and Awlad Yəhya, Girga District	3	—	21	—	1,820	880	
TOTAL ... ..	8	5	17	—	8,821	475	
GRAND TOTAL ...	40	30	0	1	17,596	880	



TABLE No. 80.—SHOWING NUMBER OF WARNINGS AND P.Vs OF CONTRAVENTION, DRAWN UP BY MALARIA UNITS AND THEIR BRANCHES IN LOWER EGYPT AND CANAL ZONE AND IN UPPER EGYPT AND THE GOVERNORATES OF SOUTHERN AND WESTERN DESERTS DURING 1943.

Province or Governorate	Unit	Burrow Pits or paddles		Filling or covering disused wells or sakias and abolishing Pumps		Cleaning drains or Miskas		Cleaning Ponds or marshes		Prohibition of Rice or sugar cane cultivation	
		Ws	P. Vs.	Ws	P. Vs.	Ws	P. Vs.	Ws	P. Vs.	Ws	P. Vs.
Behera ... { Dakahlia ... Gharbia ... Canal ... Suez ...	Idku ...	—	—	—	—	145	71	—	—	105	—
	Kafr el Dawar	—	—	—	—	57	14	—	—	—	62
	Faraskour	—	—	75	35	32	—	—	—	—	—
	Biala ...	—	—	—	—	18	—	—	—	—	—
	Ismailia ...	6	1	1	—	307	53	7	4	—	—
	Suez ...	—	—	—	—	222	9	—	—	—	—
	TOTAL ...	6	1	76	35	781	147	7	4	105	62
Fayoum ...	Abshaway ...	—	—	—	—	14	1	—	—	—	—
	TOTAL ...	—	—	—	—	14	1	—	—	—	—

TABLE No. 81.— SHOWING TOTAL QUANTITIES OF DRUGS DISTRIBUTED FOR TREATMENT PURPOSES DURING YEAR 1943

A.—Quinine.

(2 grains)	...	...	...	...	...	188,770 Tablets.
(5 grains)	...	...	...	...	...	380,586 „
(Cho colate)	...	...	...	...	...	40,495 „

B.—Plasmochine.

(Simple 1 Cgm.)	...	...	...	...	516 „
( „ 2 „ )	...	...	...	...	3,811 „
(Comp. 0.5 „ )	...	...	...	...	76,027 „
( „ 1 „ )	...	...	...	...	10,099 „

## Chapter XV.—GAMBIA

### *Diagnosis of the Disease, Identification of the Vector and Range of its Spread :*

Early in 1942, a severe epidemic disease which led to a great increase in the death rate in the Southern part of Nubia was noticed. Investigations showed that it does not bear any relation to the usual epidemics which occur in these parts of Egypt.

On April 30, 1942, The Medical Entomologist of the Ministry, Dr. S. Madwar, was sent to Nubia accompanied by Dr. Abdel Aal el Shawarby to enquire into the cause of the epidemic. It was found that 99 per cent of the first batch of blood films examined were positive for Malignant Malaria.

Since it was known that Upper Egypt was not a malarious place, the severity and extent of the malaria epidemic in these localities led to the suspicion of the introduction of a new Anopheline vector other than the endemic Anopheline species. Moreover, correspondence with the Sudan Medical Service revealed the presence of *A. gambiae* early in 1941 in pools along the shores of the Nile at Debeira and Ashkeit. As these pools were dry at the time of examination, no larvae were found then.

On June 27th *A. gambiae* larvae were found in pools along the shores of the Nile at Ballana and Abu Simbel.

The next step was to determine the Northward spread of *A. gambiae*. Dr. S. Madwar, recorded its presence on the 1st. of July 1942 in Aswan ; on the 10th of July he found it in Daraw, Kom Ombo and Edfou. In August, he found *A. Gambiae* at Luxor, and in October at Girga. In November he recorded it in Assiut and on the 21st of November it was found in Manfalout and this marked the Northern limit of *A. gambiae* in Upper Egypt.

*A. gambiae* is one of the most vicious species of Anopheline. It can be distinguished from the endemic species of Anopheline by having a band white of scales at the tip of the maxillary palpi and a speckled appearance on the femorae and tibiae formed by creamy white scales. The fertilized female feeds preferably on human blood, and then it begins to lay its eggs. During the hot season the life cycle from egg to adult takes a week, but during the cold season this cycle may be prolonged to a month.

The larva of *A. gambiae* could be distinguished from endemic Anopheline species in having the inner clypeal hairs twice as long as the outer clypeal hairs and the space between the inner clypeal hairs at least twice as wide as that between the inner and outer hairs of the same side. Moreover, the inner clypeal bears small inconspicuous branches.

The preferred breeding places for *A. gambiae* are shallow, sunlit pools free from vegetations, near human dwellings. The female feeds preferably on human blood, and thus it is frequently found in bed rooms.

*A. gambiae* is widely distributed in South, West and East Africa. It is the most important vector of Malaria in Africa. The evil reputation of the continent of Africa as the white man's grave is due in large part to the exceptional activity of this mosquito.

*A. gambiae* has been found in Mauritius, Madagascar and in Aden. It is considered as one of the most vicious malaria carriers in the world and wherever it goes it causes severe epidemics of malaria.



In 1930, *A. gambiae* was transported by boats from Dakkar in West Africa to Natal in Brazil and there caused a devastating epidemic of malaria which lasted until 1940 when it was finally eradicated from the North West of Brazil.

*A. gambiae* is endemic in the southern part of the Sudan and extends to the north part when the conditions are favourable for its spread. The possibility of its introduction into Upper Egypt, was foreseen by the Ministry as is shown by a letter sent by the Research Institute and Endemic Diseases Hospital to the Quarantine Dept., on December 21, 1938. The following is an extract from the letter, ".... Egypt is connected by airways with Palestine, Sudan and South Africa. This Ministry fears not only the introduction into Egypt of an infected Yellow Fever mosquito but also of *Anopheles elutus* from Palestine and *Anopheles funestus* and *Anopheles gambiae* from the Sudan and South Africa. These species are notorious malaria carriers in their native countries and may cause severe epidemics of malaria if introduced into Egypt."

As to the introduction of *Anopheles gambiae* into Egypt, evidence points out that it was recently introduced into Egypt; late in 1941 or early in 1942. There is no record of finding *Anopheles gambiae* in Egypt prior to that date. Moreover, the presence of *Anopheles gambiae* in Egypt would have been noticed from the severe epidemic of malaria which it causes. *A. gambiae* is endemic in the southern part of the Sudan. It has been recorded in 1938 at Zaidab, north of Khartoum and at Debeira and Ashkeit in 1941, which are few kilometers south of the southern Egyptian boundary.

As to the means of its introduction into Southern Nubia, it seems that it has been carried by boats (or winds) from Wadi Halfa to Abu Simbel owing to the increased volume of Nile traffic during World War II.

The devastating effect of the invasion of *A. gambiae* in Nubia was beyond description. The villages were deserted, the schools were closed and the people were confined to their homes. Such was the condition that the equipment and malaria drugs brought by the Medical Entomologist were left ashore for a few days and were transported by himself to the shore with the aid of the pilot and mechanic of the launch.

Moreover, the Malaria Section was still a small Section, when *A. gambiae* invaded Upper Egypt. The number of the Malaria Stations were 19 which were distributed in Lower Egypt. There was one Malaria Station budgeted to start in Aswan. The total personnel of the Malaria Section was 80 including 26 doctors. There was a shortage of means of transport. The Section had at the time ten motor-cars, eight motor-cycles and 50 bicycles, two launches and two river boats, which were distributed in Lower Egypt and I'ayoum.

In addition there were other difficulties which arose from the War situation. There was a shortage of doctors in the Ministry. Besides, the migration of people from the Western Desert, and the accommodation of a large number of Air Raid refugees created difficult situations from the public health point of view. During the difficult years of 1942-1943 everything that was wanted was in short supply. Anti-malaria drugs and insecticides were difficult to secure owing to the war situation.

#### *Measures Taken to Combat the Epidemic.*

During this difficult period, the first step that was taken was to treat the sick. Quinine and plasmochin tablets were freely distributed to the sick in distributing centres. The health condition of the people was greatly improved, and blood examination showed that 71 per cent of films examined were positive for malaria.

On the 21st May, a Malaria Inspector with two medical officers arrived at Abu Simbel and a treating unit was organised. At the end of 1942, the blood examination revealed the presence of Malaria parasites in 31 per cent of the films examined.



Meanwhile, a detailed plan was submitted to the Joint Malaria Commission on June 18, 1942 with the view of controlling the spread of *A. gambiae* and subsequent eradication of the invading mosquito. The Council of Ministers approved a credit of L.E. 15,000 for the control scheme and L.E. 2,000 for the relief of destitute malaria patients.

The first objective in this plan was to prevent the further northerly advance of *A. gambiae*. Thus a Ministerial Order was issued providing for the disinfection of all means of transport passing from Assiut to the North and also of all Nile traffic coming from the South and passing the Southern Egyptian Sudanese Frontier at Addindan.

At the end of 1942, steps had been taken to organise a scheme for the control of the epidemic and to stop the northerly advance of *A. gambiae* beyond Assiut. These two objectives were achieved. The epidemic of malaria in Nubia subsided towards the end of 1942, and *A. gambiae* was stopped from advancing beyond Assiut.

By the end of 1942, the following measures were completed :—

- (1) Six Malaria Stations were established at Aswan, Kom Ombo, Edfou, Luxor, Girga and Manfalout.
- (2) Engineers were engaged instead of doctors. Three engineers were in charge of Malaria Posts at Edfou, Luxor and Girga.
- (3) Disinfection posts were established for the disinfection of all means of road, rail and river transport.
- (4) Formation of Provincial Malaria Committees in all the Provinces invaded by *A. gambiae*.
- (5) Contacting the Middle East Supply Center for the provision of Anti-malaria drugs, and insecticides required for the Campaign.

#### *Statistical Information.*

The seasonal prevalence of *Anopheles gambiae* coincides with that of the local species. Thus there is a minor peak in April and June followed by a major peak during the months of September, October and November. Increase in malaria incidence follows shortly after the peaks. The malaria epidemic in 1942 affected Aswan, Qena and Girga Provinces.

The official statistics of cases and deaths in the provinces of Aswan, Qena, Girga and Assiut during 1942 were :—

(a) Number of malaria cases reported ... ..	10,193
(b) Number of deaths from malaria reported ... ..	320

These official statistics do not however give a true picture of the epidemic and an estimate of the incidence and deaths of malaria in the aforesaid provinces was made on the basis of attributing to malaria the increase of deaths in 1942 over 1941. Assuming that the normal mortality rate of malaria is 10 %, the number of malaria cases based on the increase in deaths would amount to 63,000.



### *Eradication.*

The next step after relieving the patients was to eradicate *A. gambiae* on the lines adopted in Brazil.

Eradication differs in its outlook and organisation from control. Its objective is to kill the last gravid female mosquito, so that it will not appear again even after stopping all control measures.

Eradication passes through two stages:—

- 1.—The first stage is to treat systematically every potential breeding place as if it were an actual breeding place, until repeated surveys give negative results for all the stages of the insect.
- 2.—The second stage is to stop all control measures during the most favourite breeding time of the mosquito. During this period extensive search for the mosquito and larva has to be made. If no positive results are found, one can say that the mosquito has been eradicated.

An eradication campaign requires that the infested area is divided into small zones. Each zone is in the responsibility of one man and the results in the zone are considered positive whether one larva or mosquito or a thousand are found.

In 1943 a detailed scheme was submitted to the Ministry and a credit of L.E. 332,300 was approved.

Through the Middle East Supply Center and Lend Lease, four and a half million tablets of Atebrine, 53 tons of Paris green and 2 tons of Pyrethrum extracts were obtained.

Moreover, Military Orders were issued providing measures to be taken against breeding places of *A. gambiae*, disinfestation of all means of transport between the infested and the non infested areas and restrictions on rice cultivation.

In addition, a training school was established at the Research Institute and Endemic Diseases Hospital for doctors, engineers and subsidiary personnel who were engaged in the *Gambiae* Campaign. Field Training was also given at Assiut, Girga, Qena and Aswan for the local personnel engaged in field work.

### *Coordination of the Work of the Section*

While preparations necessary for the Anti-*Gambiae* Campaign were being made, steps were taken with a view to the co-ordination of the efforts whether within the Malaria Section or between the Section and the other Ministries and Departments having a relation with the Campaign work, such as the Ministries of Public Works, Supplies, National Defence and Communications, or between this Ministry and the British and U.S. Forces. The year 1943 was distinguished by the fact that the principles on which the Campaign



and eradication work were based, were being formulated. Though naturally the plans for combating were not up to perfection yet the work so far achieved formed a nucleus which grew and developed gradually until the final result was reached. The following is a statement of the steps taken during the year 1943.

### *Boards.*

Reference has already been made to the meeting of the Joint Malaria Commission and the formation of Provincial Sub Committees in each of Upper Egypt Provinces. In this Ministry a Committee was constituted for the eradication of *Anopheles gambiae*.

### *Reinforcement of the Malaria Section.*

The first thing that received attention was the reinforcement of the Malaria Section so as to be able to perform its duty satisfactorily. At the termination of the year 1943, the number of Malaria Stations depending on the Section was increased to 54, the number of Medical Officers to 64 ; Engineers to 4 and assistant engineers to 39 ; 66 Sanitary Moawens were attached to the Section ; the number of overseers was increased to 509. Naturally all the increase was allotted to the infested zones. In the interest of the work, the headquarters of the campaign was located in Assiut City.

### *Organization of the Campaign.*

The scheme was formulated on the same lines as those adopted by the Brazilian Government in regard to the epidemic referred to above, with certain alterations to suit the local conditions of living, agriculture and climate. The Joint Malaria Commission, at its meeting of May 26, 1943, approved that scheme. This Commission includes Members representing the various State Departments and Ministeries as well as others from the British and American Army Medical Services.

The field which extended from southern boundaries of Nubia to the northern borders of Assiut Province, was divided into small zones, the areas of which were about 12 square kilometers each. This was called "*darak*". The *darak* is the unit of work in the mosquito eradication campaign. These should be uniform so that all statistics could be compiled and easily compared. The total number of these "*darakat*" at the end of the year 1943 amounted to 245 distributed over 17 Malaria main stations and 18 Malaria Sub-Stations, according to the nature of the locality and the severity of the epidemic. (Chart No. 3) :

P.M.O.'s and second M.O.s. were nominated for these Stations, and each "*Darak*" was provided with an adequate number of Mulahezeen (Overseers) for control and treatment. They were provided with special forms with detailed information on the work they undertake. These were collected and sorted out in a special statistical office at the Headquarters.

### *Engineering works.*

Mosquito control involves engineering works on a large scale, but eradication does not rely much on these works. Yet much engineering work was done during the year 1943, by this Ministry as well as by the Ministry of Public Works, and the Egyptian State Railways Administration. Each of these administrations proceeded with the disposal of mosquito breeding places within its territory whether by filling in, draining, or clearing. Thus during the year 1943 it was possible to get rid of birkas of an area of 2,000 feddans, out of a total of about 10,000 feddans of ponds extending all over Egypt. Most of the railway burrow pits especially in Upper Egypt were also disposed of during the year.

As the disposal of birkas, and other water collections by engineering methods requires a considerable time which fact is prejudicial to the eradication process, only such engineering work as directly related to eradication was done. This comprised :—



### 1.—*Preparation of Maps and Charts.*

A special office was instituted for the preparation of survey maps of infested zones, showing administrative and geographical divisions as well as permanent and temporary breeding places. These maps proved of great value to the work. This Office also marked gambiae breeding places on the maps and prepared charts and other statistics.

### 2.—*Construction of Roads.*

Among the difficult problems encountered at the start of the work was the absence in the infested zone of proper roads which are indispensable for easy and rapid access of staff and supplies to the breeding places. In conjunction with the Roads and Bridges Department, the Engineering Office planned a network of roads, and began their construction in the order of their importance.

### 3.—*The Shubb Swamp.*

This swamp lies to the south of Wadi Kom Ombo estates but, being of a much lower level, it forms a drain for irrigation water. This swamp is about 60 feddans wide and three kilometers long. During the flood season, it forms an extensive birka, but it becomes marshy with a depth of about 60 centimeters during the dry season, thus providing most suitable breeding places. The situation was remedied by creating artificial drains and paths to facilitate dusting. Eucalyptus trees were cultivated on the edges, to help the process of drying. Finally steps were taken to fill it in by earth from the surrounding hills.

### *Relief Work.*

This implied feeding, clothing and improving living conditions of patients, which had a direct bearing on the quick recovery of patients, and the reduction of deaths and relapses. Due attention was therefore given to relief work since the appearance of the disease until it totally disappeared. It was undertaken by the Ministries of Supplies and Social Affairs and the Charitable Institutions of Mohamed Aly Foundation and the Red Crescent Society, with the help of the Egyptian Army and the local Police officials, in conjunction with the Ministry of Health.

Amongst other measures taken, food products were banned from export from infested localities, rations were increased and extra provisions, clothes and bedding were issued to destitute patients.

## THE EPIDEMIC IN THE YEAR 1943

*Prevalence of Gambiae Mosquitoes.*—By the end of 1942 it was evident that the mosquito was present between Ballana in the South, and Maifalout in the North. With the progress of the work and the increase of surveyors who were distributed all over the field a more vivid picture of the prevalence of gambiae mosquito was made. *A. gambiae* propagates twice a year. Early during the first propagation, it was located in Aswan, Kom Ombo and Edfu districts. Later, it was located in Qena province only to subside during the summer months. During the second propagation, however, the mosquito was present everywhere as far south as Abnoub. Its prevalence was severe in Aswan, Kom Ombo, Edfou, Qena, Doshna, Akhmim and Suhag.

*Prevalence of Malaria Cases.*—In spite of the presence of the mosquito everywhere, the prevalence of the disease in epidemic form was restricted during the year 1943, to Qena Province, not to mention the 1942 epidemic wave which continued in Aswan during

the early part of the following year. Hereunder is a statement giving the quarterly statistics of cases and deaths of Malaria in the four southern provinces during the current year :—

Quarter	Aswan		Qena		Girga		Assiut		Remarks
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	
1st ... ..	3,261	155	669	2	66	1	45	1	
2nd ... ..	171	54	97	5	7	—	11	—	
3rd ... ..	79	30	902	4	69	—	79	—	
4th ... ..	142	314	3,793	649	72	5	17	1	
<b>TOTAL ...</b>	<b>3,653</b>	<b>553</b>	<b>5,461</b>	<b>650</b>	<b>214</b>	<b>6</b>	<b>152</b>	<b>2</b>	

Assuming that statistics were estimated on the basis of the general increase in deaths, and considering that the mortality rate of malaria was 5 %—treatment and relief having reduced considerably the death rate—the number of cases would amount to 72,000 in the four provinces.

*Mosquito Control.*—Control activities were extended in proportion with the number of personnel available, viz :

(1) *Quarantine Measures.*—The disinfection of all aeroplanes arriving from the south at the last air port before departure for Egypt and again at the first landing in Egypt. Further, the crew of the aeroplane were required to disinfest the plane during flight.

In addition all river craft bound northwards were disinfested at the Egyptian-Sudanese borders. Sudan Government steamers were sprayed with insecticides before leaving Wadi Halfa, and twice on their way to Shellal.

(2) *Neutral Zone.*—After the advance of the mosquito was stopped near Assiut, efforts were concentrated in providing a “ barrier ” to prevent the escape of the mosquito from the infested zone to the free zones in the north. The northern part of Assiut Province, beyond Assiut town, formed the barrier. The object of this barrier was not only to destroy mosquitoes existing therein but also to render it unpenetrable for the mosquito.

(3) *Segregation of the mosquito within the infested zone.*—Steps were taken to segregate the mosquito within the grossly infested places. It was found necessary to spray with insecticides railway coaches at Edfou, Girga, Assiut, Wasta, motor cars at Dishna, El Khazindaria, Assiut and Afwa (Giza) and river craft near Aswan, Naga' Hamadi, Esna and Assiut Barrages.

(4) *Eradication of the mosquito.*—Breeding places were sprayed with oil or dusted with Paris green. The adult mosquito was not combated within houses except in some villages where the epidemic was very severe. In 1943, 1650 tons of oil and 50 tons of Paris green were consumed. The maximum number of workmen employed in mosquito control during 1943 was 1597. Though the appointment of workmen does not necessitate a special experience, yet the number of workmen was restricted by the number of the overseers who could be trained and engaged in this work.



*Treatment.*

Treatment during 1943 was part of the duty of Malaria Stations, but was undertaken by other than control personnel. As the disease and its cause were known, blood specimens were seldom taken for examination. The clinical symptoms being sufficient for diagnosis. Distribution of malaria drugs was unrestricted; the drugs being useful for prophylaxis and treatment.

A total of 4,749,852 tablets and 672 kg. of quinine powder and other drugs were distributed during the year.

*The situation at the end of 1943.*

The year 1943 ended with the *Gambiae* mosquito still prevalent everywhere in the zones already infested; but far-reaching results were achieved, namely:—

- (1) The mosquito was halted at the south of Assiut town and prevented from escaping northwards to the non-infested districts of Egypt.
- (2) The malaria epidemic was segregated within a narrow area about one-fifth of its size at the end of 1942.
- (3) Organization of the work and provision of manpower so that the future is looked upon with confidence.

CHART No. 1



A. Gambiae

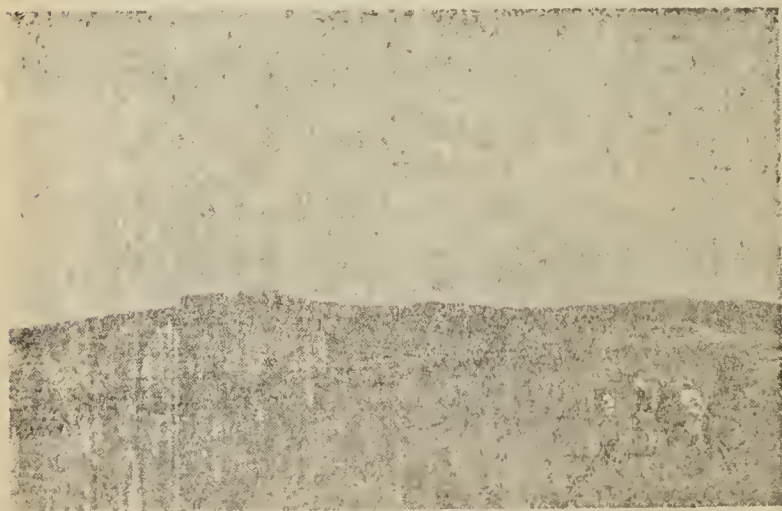
PREFERABLE BREEDING PLACES OF A. GAMBIAE



Shallow drain ending in River Nile



Sandy bank of River Nile



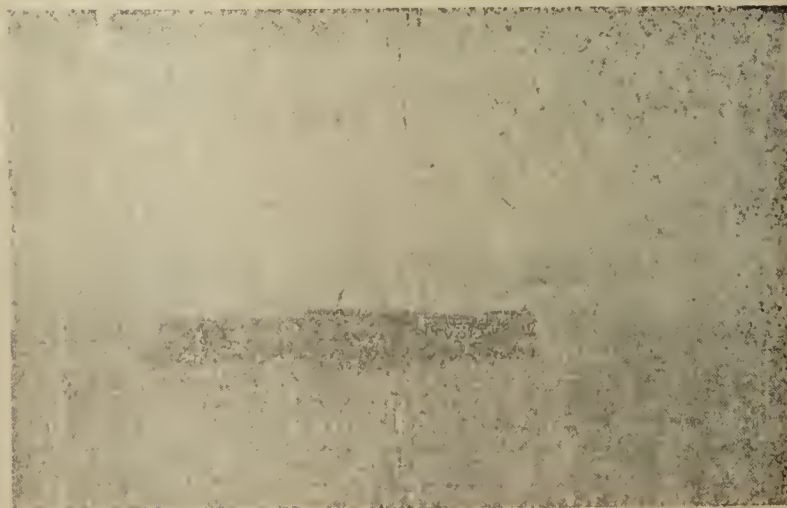
Side channel "Khor" of River Nile at Nuba



Shallow, clear seepage water



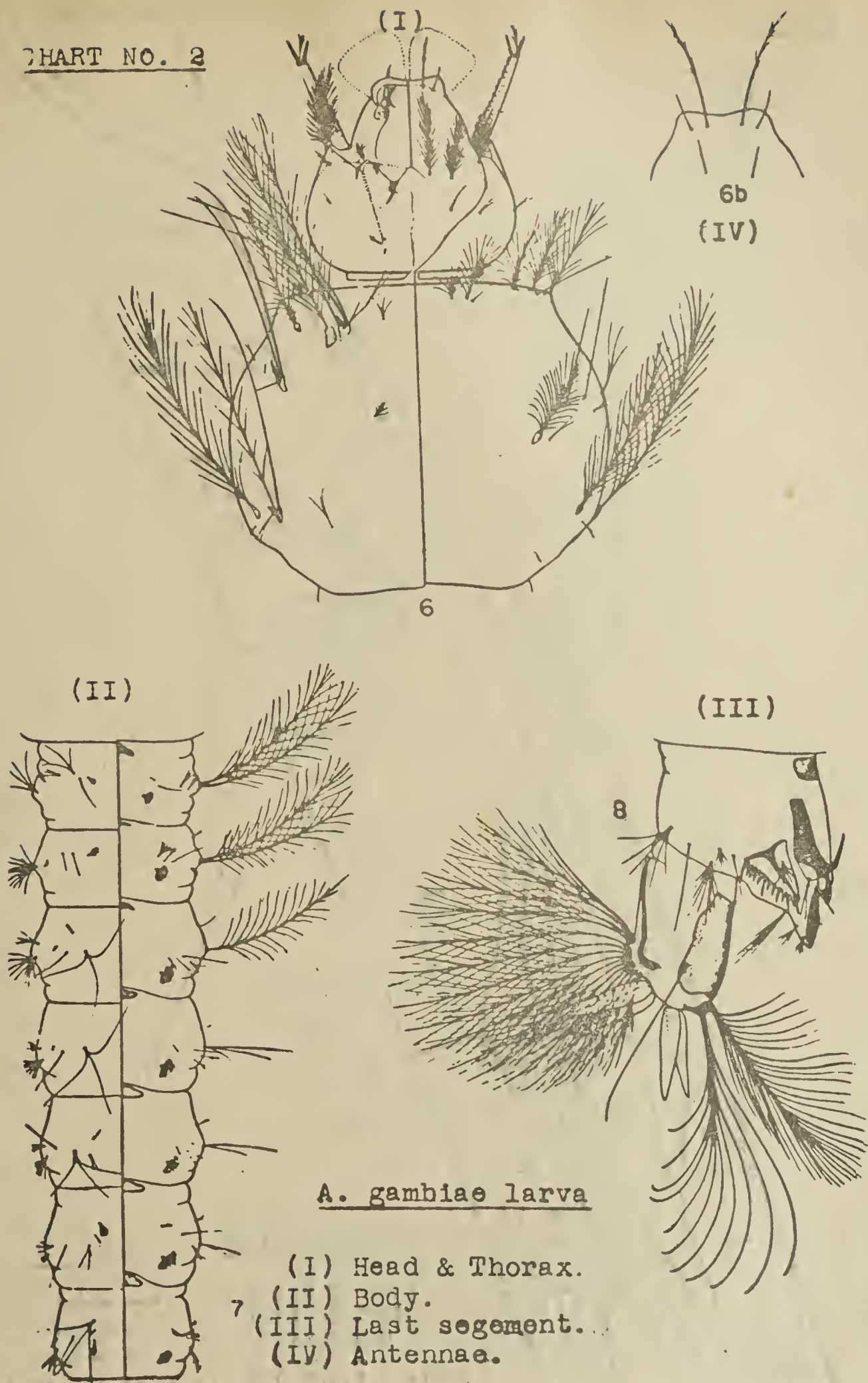
Motor boat "Koreskow" used as a Mobile Center for treatment and control work in Nuba



River transport between Wadi Halfa and Aswan  
The main way of transport in this area



CHART NO. 2



(after Causey and Cerqueira)

CHART No. 3

Distribution of  
Darakat

لوحة رقم ٣

توزيع الدركات

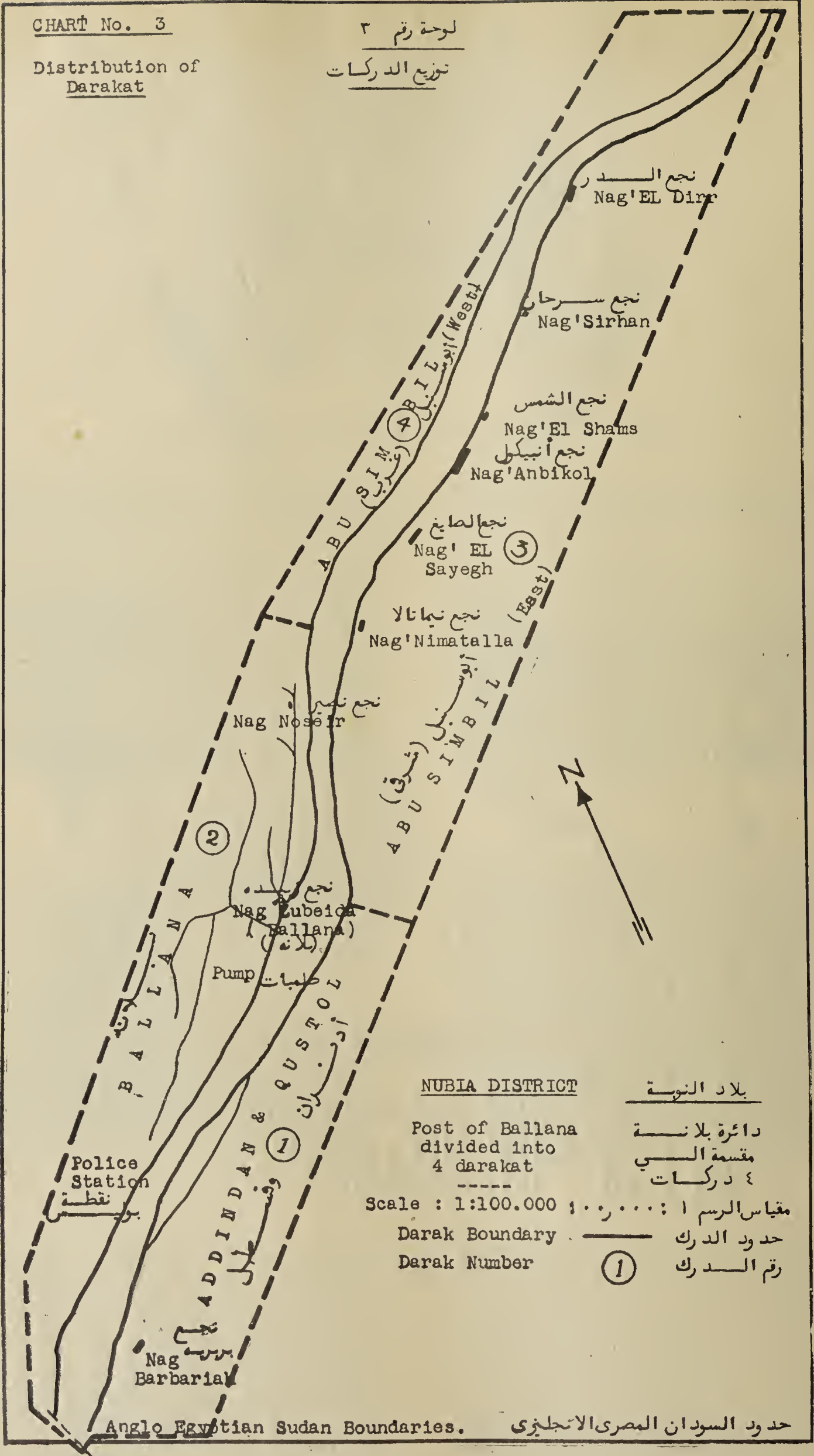




CHART NO. 4.—DAWAYIR INFECTED WITH A. GAMBIAE DURING YEAR 1943  
(Monthly Distributed)

DAIRAH											
MONTHS											
January	February	March	April	May	June	July	August	September	October	November	December
Ballana											
Eneiba											
El Dirr											
Allaqi											
Khor Rahma											
Arwan											
Daraw											
Binban											
K m Ombo											
Iqilt											
Silwa											
Sirag											
Atwani											
Idfu											
Bisaliya											
Sibaiya											
Isna											
Matana											
Arman											
Dahiya											
El Dir											
Edissat											
Luxor											
Qus											
Qena											
Ballas											
Dishna											
Hiv											
Nag <sup>o</sup> Hamadi											
Rhiyam											
Abu Shousha											
Ballana											
Girga											
Akhmin											
Buhag											
Tahia											
Badari											
Abu Tig											
Assiut											

Weekly Zone Chart for Ballana Dairah (Sample zone chart of whole infested area to show positive darakat with A. gambiae).

Week No.	MONTHS											
	January	February	March	April	May	June	July	August	September	October	November	December
4												
3												
2												
1												
1	1	2	3	4	5	6	7	8	9	10	11	12
Month	January	February	March	April	May	June	July	August	September	October	November	December
Abu Simbil W.												
Abu Simbil E												
Ballana												
Addina & Koa												
Darak												
48												
50												
52												

● A. gambiae—adult or larva.



## Chapter XVI.—BILHARZIA SNAIL DESTRUCTION

### I.—INTRODUCTION

During the year 1943, while continuing an intensive Snail Destruction campaign in Fayoum Province, the Section extended its work to Giza Province and the Dakhla Oasis. The methods of work adopted for the Destruction of the Snail hosts of Schistosomiasis were organized and standardized and the staff necessary for the expansion of the work was trained.

### II.—METHODS OF WORK

The work of the Section consists mainly in :

(1) *The Survey* of streams for the snail hosts of Schistosomiasis. The location and number of snails in a stream is determined by making stations along the stream. At each station 3 dips are taken by net and the snails collected are recorded in the survey books together with notes on the dimensions of the stream, weeds, etc.

(2) *The Treatment* of the streams found to harbour bilharzial snails. Two modes of treatment are employed :

(a) *Clearance* by mechanical methods. At low water the vegetation is removed by hoe and hand and the floating snails, debris and a top-layer of ooze harbouring snails are dipped out by net.

(b) *Sulphation* by means of copper sulphate which is applied in concentrations varying from 15-30 parts per million and left to act for a few days.

Then a "Survey after Treatment" is made to check the results of operations.

### III.—PROGRESS OF THE CAMPAIGN IN THE FAYOUM

In 1941-1942 the Province was divided into small areas and the streams surveyed or snail carriers. Since then the whole province has been treated twice. The last survey was by far the most complete including small branches. As a result the total number of streams examined was much higher than that of previous surveys, yet the infection with *Bulinus* was decidedly lowered due to clearances and sulphations in the streams during this period. Results are given in Table No. 82.

TABLE No. 82.—FAYOUM PROVINCE

Survey						No. of Streams surveyed	No. of Streams infected	Dry	Negative	Length infected in kms.	Ratio of infected to surveyed streams
1st	1942	...	...	...	...	29,650	6,806	2,272	20,572	4,618.891	22%
2nd	1942	...	...	...	...	44,032	4,996	23,662	15,375	3,005.612	11%
3rd	1943	...	...	...	...	67,573	5,318	22,362	39,892	3,588.661	8%



#### IV.—CAMPAIGN IN GIZA PROVINCE

Encouraged by the remarkable success in the Fayoum, the work was extended to Gîza Province, partly because most of the Province is irrigated by Gîza main canal which is a branch of Bahr Youssef, and also because of transport facilities and easy supervision and control by the staff of the main office in Cairo. The Province was divided into 14 areas of 5-10,000 Feddans each. Every area is staffed by a mobile unit consisting of an overseer and several heads of gangs and snail collectors. The overseers are living in their areas in tents which are moved according to the needs of the work and cover their area twice yearly. The divisions were made in conformity with the boundaries of the Irrigation Department.

The first survey of the Province was started in February 1943 and followed up with an intensive treatment of the infected streams. Table No. 83 gives the results of the surveys before and after treatment.

TABLE No. 83.—GIZA PROVINCE

Survey	No. of Streams surveyed	No. of Streams infected	Negative	Dry	Length infected in kms.	Ratio of infected to surveyed streams
Before treatment, 1942 ...	4,111	1,616	2,475	254	1,745.187	39%
After treatment, 1943 ...	7,236	1,604	5,882	293	1,243.937	22%

It is to be noted that the number of streams surveyed after treatment in 1943 was far in excess of those surveyed the first time due to better training of the personnel. Even so the ratio of the infected streams to those surveyed fell noticeably. Moreover the snail population of streams marked as infected was considerably reduced.

#### V.—RESEARCH

A number of experiments and environmental studies bearing on the destruction of snails were worked out and the results were applied in field-work. Following results were obtained :

(1) It was found that there was a seasonal variation in the number of fresh water snails ; investigation showed that there were two peaks a year, one in May, the other in December, and two reproductive periods one in spring, the other in autumn. At the time of the Nile flood the snails begin to die in great numbers. Reproductive activities stop temporarily during the winter closure. On the return of the water, the snails revive and start egg-laying in large numbers.

(2) Observations on the correlation between the location of snails and the nature of the streams during the winter closure revealed that the snails hibernate at the bottom of branch canals and accumulate in such numbers at pipes and potholes that it is made a regular practice to clean these out during the winter closure.

(3) On account of the scarcity of snails in some main canals and drains attempts to catch snails by nets often failed. Palm leaves proved very convenient traps for determining the extent of the infection and the role of those canals in restocking smaller canals.

#### VI.—WORK IN DAKHLA OASIS

A mission was sent to Dakhla Oasis to study the effect of previous anti-bilharzial measures in the village of Rashda and study the general situation in other villages. The infection in Rashda was found to be reduced but not eradicated. Many other villages had *Bulinus* snails and Schistosomiasis. It was found that in many localities no cattle could be raised due to the prevalence of liver-fluke (*Fasciola*) infection and large numbers of *Limnæa cailliaudi* snails, the intermediate host of *Fasciola*. A permanent unit for complete survey and control of all the springs and wells was formed and is now operating in the Oasis.



## Chapter XVII.—LEPROSY CONTROL

### *Abu Zaabal Leprosy Colony.*

Being the only colony of its kind in Egypt for the accommodation and treatment of lepers and at the same time providing them with agricultural and industrial training and other means for leading an ordinary and useful life, particular attention was paid this year for its re-organisation with a view to attaining the object of its creation and in the meantime to keep pace with similar institutions abroad.

It can be safely stated that wide strides have been made this year towards perfection. The colony is not, as may be presumed, intended for the isolation and treatment of lepers only. It is intended to provide lepers with an environment where they can live a normal life pursuing their individual occupations and thus be a self supported community. To achieve this end, the following arrangements were made:—

(1) Four cows were purchased as a nucleus of a dairy which will ultimately supply residents of the colony with the necessary milk and thus dispense with supplies from outside.

(2) Farming has been so organised that vegetables can now be produced throughout the year in just sufficient quantities to meet the requirements of the inmates.

(3) Bakeries have been built within the colony which when operated will supply the colony with a good quality home made bread.

(4) The drainage system constructed late last year is now in operation disposing of the colony's sewage. Arrangements have been made to turn this into fertilisers.

(5) The different workshops within the colony are now under close supervision and in regular production.

(6) New roads have been levelled within the colony and around staff quarters.

(7) More entertainment and amusement were provided to the inmates particularly on religious events, *e.g.* the Prophet's Birthday, when able lepers were authorised to practise religious rites.

(8) Funds were provided for the purchase of books, religious and otherwise, for the library. A stage was constructed from funds made available for the purpose.

92 new lepers were admitted to the colony during the year. The number of inmates at the end of the year was 350. Survey of patients at the close of the year showed that 215 lepers improved clinically and bacteriologically. Almost all of these undertook one sort of manual work or another, *e.g.* farming, landlevelling, etc., which fact demonstrates that manual work has a direct effect on the general improvement of the lepers' condition.

16 lepers deteriorated. These did not carry any kind of work either for being crippled, old or blind.

The condition of 119 lepers remained stationary. Most of them were incapable of doing any kind of manual work.

### *Cairo Leprosy Hospital.*

Of 259 new patients presenting themselves to the hospital during the year for examination, 199 were returned positive for leprosy. The remainder suffered from other skin diseases and were referred to the competent hospitals.

It is the practice of the hospital to ask out-patients to bring their contacts to the hospital for examination once every three months. Of 74 contacts examined during the year, three developed leprosy.



A total of 198 female lepers were in isolation in the hospital during the year. As this number is in excess of the hospital accommodation, special arrangements had to be made for their isolation.

Survey of the in-patients at the end of the year showed that 102 lepers improved, 41 remained stationary and 15 deteriorated.

This hospital has three out-patient clinics annexed to it, namely:—

(1) Embaba. This was started on February 4, 1939, and is open for treatment on Saturdays. 29 new patients and 2,658 visits were recorded during the year.

(2) Kara Midan : was started on November 15, 1939, and is open for treatment on Sundays and Wednesdays. During the year, 115 new lepers and 7,110 visits were recorded.

(3) Kaliub. This was started on February 4, 1941, and is open for treatment on Tuesdays. 21 new lepers and 2,811 visits were recorded.

Of 125 out-patients examined by the hospital, 78 lepers improved, 28 remained stationary and 19 deteriorated.

### *Out-Patient Clinics.*

Besides the Abu Zaabal Leprosy Colony accommodating male lepers and the Cairo Leprosy Hospital accommodating female lepers, there are eight out-patient clinics in Zagazig, Tanta, Alexandria, Mansoura and Shebin el Kom in Lower Egypt and at Suhag, Minia and Qena in Upper Egypt.

The following table No. 84 gives details of all the leprosy clinics and branches and number of lepers on record of each up till end of 1943.

TABLE No. 84.

Name of clinic	Date of opening	Number of Lepers on record till end of 1943	Name of Branch Clinics
Zagazig Leprosy Clinic ... ..	5- 4-1930	862	Abu Hammad, Shebin el Kanatar, Mashtoul, Mna el Kamh and Abu Kebir.
Suhag „ „ ... ..	28- 4-1930	1,435	Tema, Grga, Tahta and Aklmim.
Tanta „ „ ... ..	22- 2-1931	1,555	Mahalla el Kobra, Zifta, Kellin and Kafr el Zayat.
Minia „ „ ... ..	10- 6-1931	984	Beni Mazar, Abu Korkas, Samallout and Mellawy.
Alexandria „ „ ... ..	17- 1-1938	322	Damanhour, Rosetta, Edko, Mahmoudia and Dessouk.
Mansoura „ „ ... ..	15-10-1938	677	Damietta, Simbellawen, Sherkin and Dekernes.
Shebin el Kom Leprosy Clinic ...	25-10-1938	602	Menouf, Ashmoun, Quesna, Benha and Batanon.
Qena Leprosy Clinic ... ..	4- 2-1941	337	Luxor, Kous, Dishna a

There are, in addition, three in-patient departments annexed to Tanta, Minia and Qena leprosy clinics for the isolation of such lepers as require constant supervision or whose conditions render them incapable of attending on treatment days. The number of lepers isolated in these departments at the end of the year was 20, 39 and 9 respectively.

M.Os. and nursing staff usually travel between the clinic and branch clinics in ambulances specially equipped for examination and treatment purposes.

### *Number of Patients.*

Of a total of 1,488 patients attending all leprosy units during 1943, 771 were returned leprous as compared with 1,586 patients and 825 lepers in the previous year. The remainder were found suffering from other skin diseases and were referred to competent hospitals for treatment.

The total number of patients who were examined by the leprosy units since leprosy control was started in March 1929 up till the end of 1943 was 22,072 of which 10,750 were found suffering from leprosy. It was discovered, however, that 2,626 lepers were recorded in more than one clinic following the change of their residence. This leaves 8,124 lepers proper on record.

### Treatment.

Besides treatment for leprosy, lepers also receive treatment for any other disease from which they may be suffering, *e.g.* parasitic diseases, venereal diseases, etc. An ophthalmologist and a dentist pay Abu Zaabal colony and Cairo Leprosy Hospital weekly visits for the treatment of lepers.

Hydnocarpus oil was used this year in the treatment of leprosy. It was given in initial weekly doses of  $\frac{1}{2}$  c.c. increased by half a centimeter every week until a maximum dose of 5 c.c. is reached which is then maintained. Good results were obtained by the use of this oil.

Where surgical operations are required by the lepers, these are performed by the medical officers of the colony and Cairo hospital. Eye and dental diseases are treated by ophthalmologists and dentists who pay weekly visits for the purpose.

TABLE No. 85.—GIVES THE NUMBER OF NEW PATIENTS WHO ATTENDED THE LEPROSY UNITS DURING THE LAST FIVE YEARS AND THE PERCENTAGE OF POSITIVE CASES IN EACH YEAR.

Year							No. of new patients	No. of positives for leprosy	Percentage
1939	...	...	...	...	...	...	2,198	1,059	48%
1940	...	...	...	...	...	...	2,298	995	43%
1941	...	...	...	...	...	...	1,387	728	52%
1942	...	...	...	...	...	...	1,586	825	52%
1943	...	...	...	...	...	...	1,488	771	52%



TABLE No. 86.—GIVES THE MONTHLY NUMBER OF PATIENTS WHO ATTENDED THE LEPROSY UNITS IN 1943.

Month							Number of patients	Month							Number of patients
January	...	...	...	...	...	...	93	July	...	...	...	...	...	...	145
February	...	...	...	...	...	...	113	August	...	...	...	...	...	...	106
March	...	...	...	...	...	...	111	September	...	...	...	...	...	...	87
April	...	...	...	...	...	...	120	October	...	...	...	...	...	...	134
May	...	...	...	...	...	...	176	November	...	...	...	...	...	...	63
June	...	...	...	...	...	...	136	December	...	...	...	...	...	...	80





TABLE NO. 87—ANNUAL REPORT ON STATISTICS OF LEPERS WHO ATTENDED

Name of Unit	Statistics of patients			General Notes on Lepers									Transmission of							
	No. N.P.	No. Neg.	No. Pos.			Md.	Bach.	Egypt.	Forg.	Mohd.	Cpt.	O. Relg.	D. inf.	Qd. inf.	Fog. inf.	Fam: inf.	F	M	Par.	Hus.
Abu Zaabal Leprosy Colony ...	92	—	92	92	—	34	58	92	—	84	8	—	73	19	5	14	2	—	—	—
Cairo Leprosy Hospital ...	259	60	199	138	61	84	115	199	—	184	15	—	146	53	19	34	6	3	—	2
Zagazig Leprosy Clinic ...	42	4	38	25	13	13	25	38	—	37	1	—	31	7	—	7	2	—	—	—
Suhag „ „ ...	143	75	68	46	22	36	32	68	—	57	11	—	46	22	—	22	—	—	2	1
Tanta „ „ ...	230	156	74	55	19	26	48	74	—	74	—	—	63	11	—	11	3	—	—	1
Minia „ „ ...	344	274	70	55	15	34	36	70	—	46	24	—	61	9	—	9	—	1	—	—
Shebin el-Kom Leprosy Clinic ...	85	10	75	52	23	36	39	75	—	72	3	—	66	9	—	8	3	1	—	—
Alexandria „ „ ...	104	50	54	37	17	16	38	54	—	50	4	—	45	9	45	9	—	—	1	—
Mansoura „ „ ...	100	44	56	40	16	21	35	56	—	56	—	—	51	5	—	5	2	1	—	—
Qena „ „ ...	89	44	45	35	10	27	18	45	—	39	6	—	36	9	—	9	—	—	—	—
Total ...	1488	717	771	575	196	337	444	771	—	699	72	—	618	153	69	128	18	6	3	4

Name of Unit	Duration of Disease											
	1 year	2 years	3-5 years	6-10 years	11-15 years	16-20 years	20 and more	Neg. B.	Pos. B.	Nose	Skin	N and S.
Abou Zaabal Leprosy Colony ...	4	14	37	31	2	3	1	35	57	1	2	54
Cairo Leprosy Hospital ...	62	42	53	28	8	6	—	101	98	3	11	84
Zagazig Leprosy Clin ...ic ...	8	6	21	3	—	—	—	5	33	—	1	32
Suhag " " ...	13	13	34	7	—	1	—	23	45	21	3	21
Tanta " " ...	27	21	18	4	2	1	1	37	37	7	4	26
Minia " " ...	8	27	18	13	2	1	1	38	32	—	12	20
Shebin el Kom Leprosy Clinic ...	16	27	21	6	1	2	2	22	53	18	4	31
Alexandria " " ...	19	5	16	13	—	1	—	18	36	9	2	25
Mansoura " " ...	5	16	31	3	1	—	—	11	45	26	—	19
Qena " " ...	7	5	25	7	—	—	1	23	22	8	3	11
Total ...	169	176	274	115	16	15	6	313	458	93	42	323

Name of Unit	C. Gov.		Alex. G.		Dam. G.		Canal G.		Suez Gov.		Behera		Gharbia		Menoufia		Dakahlia		Sharkia		Kaliubia	
	B.	R.	B.	R.	B.	R.	B.	R.	B.	R.	B.	R.	B.	R.	B.	R.	B.	R.	B.	R.	B.	R.
Abu Zaabal Leprosy Colony	2	8	1	—	—	—	—	—	—	—	3	3	9	10	9	8	5	7	5	5	11	10
Cairo Leprosy Hospital ...	8	56	—	—	—	—	—	—	2	—	—	1	26	23	21	14	11	9	8	7	30	26
Zagazig Leprosy Clinic ...	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	5	5	21	22	11	11
Suhag " " ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta " " ...	—	—	1	1	—	—	—	—	—	—	1	1	47	49	10	8	11	11	2	2	—	—
Minia " " ...	1	2	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—
Sh. el Kom " " ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	56	56	—	—	—	—	19	19
Alexandria " " ...	—	—	3	18	—	—	—	—	—	—	10	10	25	26	1	—	3	—	—	—	—	—
Mansoura " " ...	—	—	—	—	—	—	—	—	—	—	—	—	9	10	—	—	43	43	2	2	—	—
Qena " " ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total ...	11	66	5	19	—	—	—	—	—	2	14	15	118	118	97	86	78	75	38	38	71	66

B=Birth R=Residence



AND WERE TREATED IN LEPROSY UNITS DURING 1943

[illegible]

										Notes on th special treatment of Leprosy			
Gen. No.	No. Neg.	No. Pos.	No. R.R.	No. Pos.	No. in Seg.	No. Prs.	No. Abs.	No. Pts Tel	No. Drg.	Oil		Ester	
										Number	Amount	Number	Amount
998	—	998	832	166	350	16,884	—	12,862	65,724	12,862	59,372	—	—
6,170	3192	2,978	394	2,584	198	22,870	126,957	22,671	85,871	21,125	71,223	—	—
2,007	1,145	862	173	689	—	6,468	37,546	6,430	3,895	6,468	32,118	—	—
3,550	2,115	1,435	113	1,322	—	13,346	59,869	13,278	4,980	13,307	65,749	—	—
3,754	2,199	1,555	291	1,264	20	8,795	70,290	8,721	11,062	8,639	30,317	—	—
2,082	1,098	984	94	890	39	8,427	41,149	8,427	24,365	7,832	39,500	—	—
916	314	602	265	337	—	10,144	19,346	10,069	10,534	9,872	39,461	—	—
817	495	322	95	227	—	4,322	4,268	11,259	2,170	74,286	21,272	—	—
1,018	341	677	311	366	—	7,377	26,304	7,321	4,154	7,372	36,641	—	—
760	432	337	58	279	9	5,045	11,192	5,000	1,528	4,933	22,710	—	—
<b>22,072</b>	<b>11,322</b>	<b>10,750</b>	<b>2,626</b>	<b>8,124</b>	<b>616</b>	<b>103,678</b>	<b>396,921</b>	<b>106,038</b>	<b>214,283</b>	<b>96,696</b>	<b>418,363</b>	<b>—</b>	<b>—</b>

[illegible]

TABLE 88.—NUMBER OF LEPROSY UNITS SINCE 1929

Year	Principal Units	Branches
1929... ..	1	—
1930... ..	3	—
1931... ..	5	—
1932... ..	5	4
1933... ..	6	8
1934... ..	6	8
1935... ..	6	10
1936... ..	6	12
1937... ..	6	15
1938... ..	9	15
1939... ..	10	21
1940... ..	10	33
1941... ..	10	38
1942... ..	10	39
1943... ..	10	39



## Chapter XVIII.—SUMMARY OF THE WORK OF THE PUBLIC HEALTH LABORATORIES

### 1.—*Bacteriological Section :*

The total number of specimens examined bacteriologically in the Central, Provincial and Branch Laboratories, during the year 1943 was 516,118.

### 2.—*Pathological Section.*

1303 specimens were examined during the year under review in this Section.

### 3.—*Chemical Section.*

The total number of samples examined chemically in the Central Laboratories Assiut and Tanta Chemical Laboratories, during the year 1943 was 101,959.

### 4.—*Water Section.*

#### (a) Bacteriological Service :

The total number of samples of water, aerated water, ice and syrup examined by this section, during the year 1943 was 6484.

#### (b) Chemical Service :

During the year some 599 Samples of water have been subjected to chemical analysis.

### 5.—*Antirabic Institute and Hospital.*

During the year 1943—8045 patients attended the Institute. Out of these 7213 were fully treated.

### 6.—*Serum and Vaccine Institute :*

The following vaccines and sera have been prepared during the year 1943 :—

(1) T.A.B.	... ..	896,315 ccs.
(2) Anti-plague vaccine	... ..	163,500 „
(3) Cholera vaccine	... ..	126,100 „
(4) Gonococcus vaccine	... ..	24,135 „
(5) Staphylococcus vaccine	... ..	12,580 „
(6) Typhus vaccine	... ..	4,000 „
(7) Diphtheria prophylactic (Formol Toxoid)	27,834 boxes—each box for one person.	
(8) Calf lymph vaccine	... ..	31,986,650 doses.
(9) Diphtheria Antitoxin	... ..	388 ampoules, 7cc—containing 4000 Inter. Units.
		2,823 ampoules, 10cc. 4000 Inter. Units.
		800 „ 10cc. 8000 „
		800 „ 10cc. 20,000 „
(10) Anti-scorpion serum	... ..	9,753 ampoules, 2cc.

## Chapter XIX.—SUMMARY OF THE WORK OF FOUAD I INSTITUTE FOR RESEARCH AND TROPICAL DISEASES HOSPITAL

4795 patients were admitted to the out-patients department for examination or treatment in the year 1943, out of which 3452 were males and 1343 females. Compared with previous years, the number is very small due to the engagement of doctors and specialists in combating malaria in Upper Egypt and training a large number of technical assistants in malaria work at the Institute.

For these reasons, no research work was done from February to September since it was only restricted to subjects concerning malaria and the mosquito which transmitted it in Upper Egypt i.e., *Anopheles gambiae*. The work in the hospital attached to the Institute was resumed in October.

During the few remaining months of the year, the following investigations were carried out ;

## I.—BILHARZIA

Treatment of Bilharzia with Stibophen was tried with special attention to the following points :

- (1) The curative power (efficiency of the compound).
- (2) The doses sufficient for treatment in relation to age or body weight.
- (3) Signs and symptoms which may occur during the course of treatment.

The compound was used in treating about 100 cases of Bilharzia either urinary or intestinal or both. Some of the cases had other parasitic infections in addition to Bilharzia. Patients of different age groups and body weights were chosen. The method used in the treatment was to give the patients one daily injection on five successive days. Examination of excreta began after the fifth injection. Further injections and examinations were done on alternate days, until cure from Bilharzia was obtained. Daily examinations after cessation of treatment were carried out for a week and then once weekly for a month if possible. The 1st injection was usually half the maximum dose which is 5 c.c. for a patient above 60 kgs. body weight. Each of the subsequent doses was 5 c.c. also. The smallest total dose of 17 c.c. was given to a girl 8 years old weighing 20 kilogrammes, who took nine injections the first of which was 1 c.c. and each of the subsequent injections was 2 c.c.

The largest total dose (63.5 c.c.) was given to two patients aged 27 and 40 years and weighing 71 and 63 kilogrammes respectively.

It was found that the total amount of the drug given to all patients was 2000 c.c., and the total body weight of patients 2505 kilogrammes. Therefore the average dose per kilogramme body weight was found to be 0.8 c.c. But this average dose varies slightly with age groups and very slightly with sex as will be shown below :

(1) *Children aged 13 years or below:*

Total amount of drug given... ..	232	c.c.
Total body weight of patients ... ..	262	kgms.
Average dose per kgms. body weight ... ..	0.886	c.c.

(2) *Adult females:*

Total amount of drug given... ..	119	c.c.
Total body weight of patients ... ..	181	kgms.
Average dose per kgm. body weight ... ..	0.77	c.c



**(3) Adult males :**

Total amount of drug given...	...	...	...	...	...	...	...	1,649	c.c.
Total body weight of patients	...	...	...	...	...	...	...	2,192	kgms.
Average dose per kgm. body weight	...	...	...	...	...	...	...	0.75	c.c.

*Number of injections :*

The number of injections required to effect an apparent cure varied between 5 and 15 as shown in the following table :

No. of injections	No. of patients
15	1
14	2
13	3
12	11
11	5
10	9
9	12
8	4
7	4
6	4
5	1

This shows that, in most of the patients, the number of injections varied between 9 and 12. An increase of the maximum dosage will be tried in another set of patients taking into consideration their physical fitness.

*Excretion of antimony by the kidneys :*

Special attention was paid to the examination of the patients' urine to determine the extent of the excretion of pyrochatechin by the kidneys and the relation of the rate of this excretion to cure of bilharzia. In two cases traces of pyrochatechin was found in the urine, but nevertheless treatment was continued. It was observed that complications which occurred were very slight. Usually cases which are slow excretors require less dosage of the drug and are less liable to relapse, but are more prone to suffer from complications during treatment than the rapid excretors.

*Complications that occurred to some patients during treatment :*

(1) A patient complained of oedema of the face after the third injection (dose 3.5-5 c.c.). His urine was found loaded with albumin but there was no sugar or casts. The blood pressure was 120/75, excretion of pyrochatechin was very slight but urea clearance was satisfactory. The treatment was continued with no increase in complications and the patient was cured after the sixth injection.

(2) A patient began to complain of vomiting after the fifth injection (dose 3.5-5 c.c.). The pyrochatechin excretion in urine was found to be very slight, but the liver function was satisfactory and icterus index normal. He was cured from bilharzia without further injections.

(3) After the eighth injection of Stibophen, a patient with aortic regurgitation, history of rheumatic fever, positive Wassermann and Kahn tests and enlargement of spleen and liver began to complain of fainting sensation accompanied with tenderness in the liver area. He was given 15 gms. of glucose powder t.d.s. Treatment was continued. These symptoms disappeared gradually and he was eventually cured of bilharzia.



(4) Two hours after the fourth injection, one patient began to suffer from tenderness in the loins. The pyrochatechin excretion was satisfactory. The pulse was 62 and the blood pressure 120/80. These pains disappeared after complete rest for two hours. Treatment was continued and the patient was cured without further complications.

(5) After the third injection (dose 3.5 c.c.) one patient began to complain of giddiness. His pulse was 74. Pyrochatechin excretion was good and icterus index normal. Treatment was stopped because of the occurrence of these symptoms after each injection.

## SOME CASES OF BILHARZIA COMPLICATED WITH PULMONARY AND OTHER DISEASES TREATED WITH STIBOPHEN

Some patients with pulmonary diseases accompanying bilharzia were treated with Stibophen without the appearance of severe symptoms during treatment. The following is a summary of some of these cases :

(1) A patient with a tuberculous focus in the right lung who was treated at Kasr-El Aini Hospital in the year 1939, came to the Institute complaining of right renal colic and had urinary bilharziasis. He was treated with Stibophen and was cured after the eighth injection. He did not complain of respiratory manifestations nor was there any abnormal rise in his temperature.

(2) A patient had a tuberculous cavity in the apex of the right lung, his sputum was positive for T.B., and used to complain of asthmatic attacks. He had urinary bilharziasis. He was cured after the ninth injection of Stibophen. During treatment he complained of increase of cough (specially during the night) and number of asthmatic attacks, but no abnormal rise of temperature occurred during the treatment.

(3) A patient with non tuberculous cavitations at the bases of both lungs, complaining of numerous asthmatic attacks since 1 1/2 years before treatment, amounting to 10 attacks a day, having urinary bilharziasis. He was given Stibophen injections (0.2 to 3.75 c.c.). An increase in the number of attacks was observed amounting to 17 a day, but after ending the treatment by the tenth injection, the number of attacks declined to about 8 a day. Sputum increased to a noticeable amount but was found negative for bilharzia ova on repeated examinations.

(4) A patient with a rheumatic organic murmur in the heart, one week after receiving a dose of oil of chenopodium in the in-patients, was treated with increasing doses of Stibophen (1—2—3—4 c.c.) and was cured after the ninth injection. No symptoms of intoxication appeared during the course of treatment except slight palpitation, two hours after each injection. His average pulse rate was 67.

(5) A patient suffering from urinary bilharziasis was admitted complaining of right renal colic. His urine contained albumin, hyaline and granular casts, but radiological examination revealed no renal calculi in the urinary tract. His renal functions were as follows :

Urea in blood               =36 mgms.

Urea in urine               =67     97     50     40

Urea percentage         = 0.9    1.6    2     2.2

Urea clearance 64 % of normal. Stibophen examination positive. Blood pressure 110/65.

No manifestations appeared during treatment and the patient was cured after the seventh injection.

The results of treatment with this compound have been published in the Journal of the Royal Egyptian Medical Association (1944).



## 11.—ASCARIS INFECTION

The chemical department of the Ministry of Agriculture prepared oil of chenopodium locally. A certain amount was sent to the Institute to test its efficiency in the treatment of ascariasis.

After proving its being non toxic to experimental animals, its efficiency was tested on patients. It proved to be as good as the imported oil. No toxic or unpleasant symptoms appeared during treatment. A special report was written on this subject.

## 111.—TAPE WORM AND HETEROPHYES INFECTION

Male fern was imported from Switzerland this year and the Institute prepared an extract which was used in treating a large number of patients harbouring Taenia and Heterophyes infections. The dose used ranged between 2 and 6 c.c. according to the weight of the patient. It was observed that most patients did not stand the maximum dose of this extract showing symptoms of circulatory failure one or two hours after ingesting the extract, but no deaths occurred. It was agreed that the maximum dose should not exceed 4 c.c. of this extract.

Using this 4 c.c. dose, it was found that all cases of Heterophyes were cured from one dose. Also a high percentage of patients harbouring Taenia got rid of their tape worms provided that they were well prepared before treatment.

## IV.—ANCYLOSTOMA INFECTION

The Institute investigated the following problems on patients with ancylostoma anæmia :

(1) Estimation of the amount of iron in the blood and serum before and after treatment.

(2) Estimation of the amount of vitamin B1 in the blood and urine, and serum proteins to find out the relation between these factors and the anæmia which accompanies ancylostomiasis. This piece of research has been published in the Journal of the Royal Egyptian Medical Association, August 1944.

## V.—DYSENTERY

### (1) Amoebic dysentery.

Several investigations were made on amoebic dysentery this year including (i) investigating the effect of emetine bismuth iodide on *Entamoeba histolytica* in cases of acute dysentery in a daily dose of one tablet weighing one grain, for six days to find out whether this treatment can replace emetine injections. Results of this treatment proved it to be insufficient to effect even an apparent cure.

Increasing the dose to two tablets daily for ten days was tried and proved to be efficient in all cases in which it was used.

### (2) Dysentery resulting from *Balantidium coli* infection.

A male deaf-mute patient, 15 years old, was found to have dysentery resulting from infection with *Balantidium coli*. He was complaining of tenesmus, diarrhoea and blood and mucus in stools. He was treated with sulphaguanil tablets, five grams daily for five days, and the causitive parasite disappeared on the third day from the beginning of treatment. Stools were negative for ten days after ending the treatment. The patient stopped coming for further examination. There was no evidence that this patient, coming from Assiut (Upper-Egypt), has come in contact with pigs.

### (3) Bacillary dysentery.

The number of cases examined by the McConky's medium culture method for dysentery bacilli was 94. Eleven were found positive and the results were as follows :

Bacillus Flexner infection	... ..	6 cases
„ Morgan	... ..	6 „
„ Paracolon	... ..	2 „

One of these cases was positive for both *Bacillus Flexner* and *Morgan*.



## Chapter XX—MEMORIAL OPHTHALMIC LABORATORY GIZA.

Throughout the year 1943, the Memorial Ophthalmic Laboratory continued to fulfil the functions for which it was originally created, namely to assist in the training of ophthalmic surgeons, to serve as a pathological laboratory for the many ophthalmic hospitals scattered throughout the country and to act as a centre for clinical and bacteriological research in ophthalmic diseases especially those peculiar to Egypt. It is therefore convenient to review the work of the year as follows :

### *1.—Post-Graduate Training.*

The staff of the Laboratory again took part in the post-graduate instruction of candidates for the Diploma in Ophthalmic Medicine and Surgery. This included clinical, surgical, pathological and bacteriological teaching which was supplemented by practical instruction.

### *2.—Pathological Section.*

The routine pathological work of the Laboratory continues to increase steadily with the increasing number of patients treated in hospitals throughout Egypt. Many specimens of interest were encountered during the year and these will be reported upon fully in the Annual Report of the Laboratory.

### *(3) Clinical Investigation.*

There is no out-patient department in the Laboratory for routine eye treatment but only such cases as are recommended for special clinical investigation are accepted. During the year, many such cases were investigated and quite a number were of more than usual clinical interest. For further details those interested should refer to the Annual Report published by the Laboratory.

### *(4) Research.*

Subjects of clinical, therapeutic and bacteriological interest have received careful attention. Experiments on the treatment of acute ophthalmias by means of sulpho-namide derivatives have continued with amazing success. This drug may well be regarded as of epoch-making importance to Egypt. Whereas in the past thousands of children were blinded annually as a result of ophthalmia, now no eye should ever be lost through this cause.

Research into the aetiology of trachoma likewise continues to receive special attention. Some progress has been made but the peculiar difficulties connected with the problem are great.

This brief report merely outlines some of the activities of the Laboratory, so that those wishing to have further details should consult the reports published annually by the Memorial Ophthalmic Laboratory.



Appendix I.—MEDICAL PERMITS

TABLE NO. 89.—SHOWING THE NUMBER OF PRACTITIONERS OF THE MEDICAL AND ALLIED PROFESSIONS AT THE END OF THE YEAR 1943 AS COMPARED WITH THAT OF THE YEAR 1942

PROFESSION	At the end of 1942	At the end of 1943
Medical Practitioners ... ..	3,913	3,968
Veterinary Surgeons ... ..	461	481
Dental Surgeons ... ..	493	502
Dentists without diplomas* ... ..	127	126
Pharmacists ... ..	1,007	1,037
Asst. Pharmacists* ... ..	336	335
Midwives ... ..	691	716

\* No permits are now issued to persons of these two categories.

TABLE NO. 90.—SHOWING THE NUMBER OF PERSONS AUTHORISED TO PRACTISE THEIR PROFESSIONS IN EGYPT DURING THE LAST FIVE YEARS

PROFESSION	1939	1940	1941	1942	1943
Medical Practitioners ... ..	142	113	139	158	115
Veterinary Surgeons... ..	24	38	8	29	28
Dental Surgeons ... ..	20	11	13	13	10
Pharmacists ... ..	53	46	45	45	43
Midwives ... ..	15	44	45	43	25
Dayas } Green Permits ... ..	226	288	197	193	276
} White Permits ... ..	1	2	2	1	3
Barbers ... ..	2	5	9	3	11

TABLE No. 91.—SHOWING THE ORIGIN OF MEDICAL DIPLOMAS THE HOLDERS OF WHICH WERE AUTHORISED TO PRACTISE MEDICAL PROFESSIONS DURING 1943

Professions	Cairo	Alex- andria	Great Britain	France	Lebanon	Syria	Switzer- land	Palestine	Total
Medicine ... ..	102	4	2	3	4	—	—	—	115
Veterinary Surgery ... ..	28	—	—	—	—	—	—	—	28
Dental Surgery ... ..	9	—	—	—	—	1	—	—	10
Pharmacy ... ..	32	—	1	7	1	—	2	—	43
Midwifery ... ..	24	—	—	—	—	—	—	1	25

All those who were authorised to practise their professions during 1943 were of Egyptian nationality.

TABLE No. 92.—SHOWING THE RESULT OF THE STATE EXAMINATIONS HELD DURING 1943 FOR MEDICAL PRACTITIONERS, PHARMACISTS AND DENTAL SURGEONS HOLDING FOREIGN DIPLOMAS FOR THE PURPOSE OF OBTAINING PERMITS TO PRACTISE THEIR PROFESSIONS IN EGYPT.

EXAMINATION	Number	Egyptians		Foreigners		Total	
		Succeeded	Failed	Succeeded	Failed	Succeeded	Failed
Medicine ... ..	18	2	11	—	5	2	16
Pharmacy ... ..	8	1	5	—	2	1	7
Dentistry ... ..	14	2	9	2	1	4	10



## Appendix II.— MEDICAL COMMISSIONS

A total of 24,680 medical certificates were issued by the Central Medical Commission during 1943 or 1,545 certificates less than in 1942.

Of this number, 10,364 dealt with candidates for Government service or educational missions abroad. These consisted of 5,993 candidates for *cadré* or temporary posts, 6 for educational missions and the remaining 4,365 for *hors cadre* posts.

75·5 % of the former group and 56·5 % of the last group passed the examination successfully.

Of the 24·5 % failures of the first group, 17·2 % failed in vision—myopia accounting for the greater part ; 4·5 % for defects of the urinary system—albumen or traces thereof being the main cause ; 1·1 % for heart diseases—with incompetency of the heart as the cause ; and 1·6 % for other diseases, *e.g.* varicoceles, hydroceles not treated or removed by operation, deformation, debility or respiratory diseases.

Of 10,239 government officials and employees reporting sick, 6,529 were *cadré* and temporary and 3,710 were *hors cadre*. Of those granted sick leaves by the Central Medical Commission or by Cairo Medical Officers of Health and approved by the Central Medical Commission, 2,893 of the former and 843 of the latter suffered from medical diseases and 1,178 of the former and 737 of the latter suffered from surgical or ophthalmic diseases.

TABLE NO. 93.— SHOWS THE PERCENTAGE OF THE MOST PREVALENT DISEASES.

Diseases	Cadré and Temporary Officials		Hors Cadre Employees	
	Number	Percentage to the Total	Number	Percentage to the Total
Nose and Larynx ... ..	154	3·70/o	36	2·30/o
Bronchi and Lungs ... ..	388	9·50/o	139	8·80/o
Heart and Blood Circulatory System ... ..	255	6·20/o	50	3·20/o
Stomach and Intestines ... ..	221	5·40/o	43	2·80/o
Liver ... ..	142	3·40/o	22	1·40/o
Kidney and Cystitis ... ..	246	6·00/o	57	3·70/o
Neurasthenia and Mental Diseases ... ..	123	4·00/o	35	2·30/o
Nervous System ... ..	112	2·70/o	51	3·30/o
Anaemia and General Debility ... ..	476	11·60/o	156	9·90/o
T.B. ... ..	120	2·90/o	54	3·50/o
Syphilis ... ..	7	0·20/o	11	8·70/o
Rheumatism ... ..	351	8·60/o	95	6·10/o
Fevers ... ..	210	5·10/o	75	4·80/o
Other Medical Diseases ... ..	88	2·10/o	19	1·30/o
Eye Diseases ... ..	175	4·30/o	63	4·00/o
Ear and Dental Diseases ... ..	97	2·30/o	17	1·10/o
Appendicitis ... ..	31	0·70/o	12	0·80/o
Urinary System and Stones ... ..	41	1·00/o	20	1·30/o
Various Surgical Operations ... ..	527	12·90/o	392	24·90/o
Fractures ... ..	132	3·20/o	156	9·90/o
Minor Surgical Operations (fistula, piles, hernia and hydroceles) ... ..	175	4·20/o	62	3·90/o

A total of 38,575 officials and employees were granted from 1 to 10 days sick leave by Medical Officers of Health in Kisms, Markazes and Out Posts in all the Governorates and Provinces. Of these, 30,085 or 79 % suffered from medical diseases, 6,034 or 16 % from surgical diseases and 1,956 or 5 % from ophthalmic diseases. The total days of sick leave granted to the *Cadré* and Temporary officials only amounted to 120,145.

1,196 cadré and temporary officials and 634 hors cadre employees in Cairo only were granted from 1 to 10 days sick leave by the Central Medical Commission or by Cairo Medical Officers of Health. 166 cadré and temporary officials and 103 hors cadre employees were examined by the Central Medical Commission but were not granted any sick leave.

624 cadré and temporary officials and 754 hors cadre employees were examined by other Provincial and Governorate Medical Commissions but were not granted any sick leave.

2,875 cadré and temporary officials and 946 hors cadre employees were granted from 11 to 30 days sick leave and over by the Central Medical Commission and by Cairo Medical Officers of Health.

The Central Medical Commission granted 19 cadré and temporary officials longer sick leaves terminating by retirement on pension ; and pronounced 205 hors cadre employees medically unfit for further service.

### *Medical Examinations of Pilots.*

Of 108 candidates for private pilot licence " A " examined by the Central Medical Commission during 1943, 95 were found fit (92 on first examination and 3 on second examination). 11 of the 13 failures were examined once and 2 were examined twice.

All of the 10 candidates for public pilot licence " B " were found fit (9 on first examination and one on second examination).

Of 76 private pilots examined for renewal of licence, 72 were found fit (71 on first examination and one on second examination). The four failures were examined once.

All 73 public pilots examined for renewal of licence were found fit on first examination.

### *Provincial and Governorate Medical Commissions.*

A total of 36,143 medical certificates were issued by Provincial and Governorate Medical Commissions during the year or 4,485 certificates more than in 1942.



TABLE NO. 94.—ANNUAL RETURN SHOWING CLASSIFICATION OF DISEASES CONTRACTED BY OFFICIALS AND EMPLOYEES FOR WHICH SICK LEAVES WERE GRANTED BY THE CENTRAL AND PROVINCIAL MEDICAL COMMISSIONS AND BY THE DISTRICT M.O.S. IN CAIRO AND APPROVED BY THE C.M.O. DURING THE YEAR 1943.

DISEASES

Medical Diseases															Surgical and Ophthalmic Diseases																																																																				
															Total																																																																				
Nose and Larynx			Bronchi and Lungs			Heart and Cir. System			Stomach and Intestines			Liver			Kidney and Cystitis			Nervousness			Mental Diseases			Anaemia and General Debility			Nervous System and Cereb. and Cord			T. B.			Syphilis			Rheumatism			Fevers			Other Medical Diseases			Total																																						
P. & T.	H. C.		P. & T.	H. C.		P. & T.	H. C.		P. & T.	H. C.		P. & T.	H. C.		P. & T.	H. C.		P. & T.	H. C.		P. & T.	H. C.		P. & T.	H. C.		P. & T.	H. C.		P. & T.	H. C.		P. & T.	H. C.		P. & T.	H. C.		P. & T.	H. C.		P. & T.	H. C.																																								
164	36		388	139		255	50		221	43		142	22		246	57		69	4		54	31		112	51		476	156		120	54		7	11		351	95		210	75		88	19		2,893	843		175	63		24	8		31	12		29	15		58	29		79	28		9	5		41	20		527	392		132	156		73	9		1.178	737	
152	54		606	528		275	132		452	271		216	117		323	189		251	94		7	2		64	29		716	591		26	56		3	83		663	417		361	605		218	174		4.333	3.362		181	214		39	34		34	45		52	87		82	51		185	143		16	48		81	103		603	1.234		177	442		90	27		1.540	2,428	
306	90	...	994	667	...	530	182	...	673	314	...	358	139	...	569	246	...	320	98	...	61	33	...	176	80	...	1192	747	...	146	110	...	10	94	...	1014	512	...	571	680	...	306	193	...	7,226	4,205	...	356	277	...	63	42	...	65	57	...	81	102	...	140	80	...	264	171	...	25	53	...	122	123	...	1,130	1,626	...	309	598	...	163	36	...	2,718	3,165	...
Central Medical Commission Cairo ... ..															Other Governorate and Provincial Commissions ... ..															TOTAL																																																					





### Appendix III.—CENTRAL STORES

Again, the Central Stores continued to obtain and supply the units of the Ministry with up-to-date apparatus, equipment, surgical instruments and drugs. Arrangements were also made for provisioning all hospitals throughout the country with diets.

The following new units were supplied with equipment and appliances:—

- 1.—Some sections in the Boulac Health Group.
- 2.—Two ancylostoma branches within district hospitals.
- 3.—An ear, nose and throat section in general hospitals.
- 4.—Two dental clinics.
- 5.—Two skin and venereal diseases clinics.
- 6.—Conversion of two ancylostoma school clinics to the new system.
- 7.—New wards in Demerdash Pasha Hospital.
- 8.—Two mobile child welfare centres.
- 9.—Expansion of the vaccine and Serum Institute.
- 10.—An ancylostoma mobile clinic.
- 11.—A travelling ancylostoma hospital.
- 12.—A sanatorium at Mehalla el-Kubra.
- 13.—Two chest diseases dispensaries.
- 14.—Two in-patient departments in chest diseases dispensaries.
- 15.—A tuberculosis ward in Kharga Oasis hospital.
- 16.—A colony for convalescents in Marg.
- 17.—A hospital for medical and endemic diseases at Tewfikieh.
- 18.—Conversion of Zawamel and Eneiba Health Groups into district hospitals.
- 19.—An ophthalmic branch in district hospitals.
- 20.—A hospital for incurable diseases in Cairo.
- 21.—Schools for assistant midwives and health visitors.
- 22.—A mobile leprosy unit.
- 23.—16 general ophthalmic and ancylostoma hospitals following transfer from provincial councils to this Ministry.
- 24.—Five venereal diseases clinics ex-provincial councils.
- 25.—Seven ophthalmic branches ex-provincial councils.
- 26.—One out-patient clinic ex-provincial council.
- 27.—3 village shelters ex-provincial councils.
- 28.—19 Child welfare centres ex-provincial councils.
- 29.—7 Dayas schools ex-provincial councils.

The work of the Central Stores is briefly shown in the following table No. 96:—

Kind of Work	1943
Receipt vouchers ... ..	13,926
Issue Vouchers ... ..	63,015
Claims ... ..	1,282
Correspondence outward ... ..	128,355
Correspondence inward and forms ... ..	124,780
Postal parcels despatched ... ..	9,208
Postal parcels received ... ..	3,102
Railway parcels despatched ... ..	45,896
Railway parcels received ... ..	35,836
Workshop labour (articles repaired) ... ..	72,651
Workshop labour (articles newly made) ... ..	106,208

The following new units were opened for treatment during 1943:—

- 1 Incurable diseases hospital at Helwan, Cairo.
- 1 Omar Pasha Sultan hospital at Minia.
- 1 Medical Commission at Alexandria.
- 3 Dental clinics in Mit-Ghamr, Suez and Zagazig hospitals.
- 2 Sections for ear, nose and throat in Zagazig and Mehalla-el-Kubra hospitals.



- 2 Medical diseases sections in Shebin-el-Kom and Benha hospitals.
- 3 Gynaecological and obstetric sections in Qena, Kaliub and Ismailia hospitals.
- 1 Children section in King's hospital.
- 1 Ophthalmic branch in Aga district hospital.
- 1 Museum for hygiene.
- 1 Repair workshop for propaganda apparatus and vehicles.
- 1 Venereal diseases clinic at Luxor.
- 1 Princess Khadiga Abbas Halim hospital for bone tuberculosis at Helwan.
- 1 T.B. section in Fouad Sanatorium for advanced cases.
- 1 Colony for convalescents at Marg.
- 1 Fever Hospital at Embaba.
- 1 Public Health Office at Sharabia.
- 2 Ancylostoma branches in Kafr el Dawar and Dekernis hospitals.
- 1 Ancylostoma hospital No. 41 at Delengat.
- 1 Medical and endemic diseases hospital at Tewfikieh, Behera.
- 1 Ancylostoma clinic No. 17 at Belcas.
- 2 Mobile ancylostoma clinics Nos. 4 and 6.
- 1 Mobile child welfare squad at Kous.
- 15 Malaria stations at Bellana, Edfu, Qena, Nag-Hamadi, Suhag, Assiut, Minia  
Dakhla Oasis, Benban, Dabaa, Allaki, Khour-Rahmah, Derr, Baliana and Wadi  
el Natroun.
- 10 Schools for assistant midwives and visitors annexed to child welfare centres at  
Sharabia, Zeitoun, Old Cairo, Shubra, Boulac, Bab el Sharia, Tanta, Zagazig,  
Beni-Suef and Assiut.
- 2 District hospitals ex-health groups in Zawamel and Eneiba.
- 2 Annexation of Princess Shuicar Ibrahim out-patient clinic and municipal out-  
patient clinic at Damanhour to the Ministry.

Provincial council units taken over by the Ministry:—

- 3 Hospitals at Zefta, Kafr el Sheikh and Fowa.
- 1 Mahmoudiah out-patient clinic.
- 6 Ophthalmic branches in Fowa, Menouf, Ashmoun, Tala, Fashn and Belbeis hospitals.
- 2 Travelling ophthalmic hospitals Nos. 14 and 15.
- 4 Ophthalmic hospitals at Mehalla el Kubra, Santa, Minshat Sabri and Zifta.
- 1 Conversion of Kafr el Zayat ophthalmic hospital into a district hospital.
- 4 Venereal diseases clinics at Mit Ghamr, Benha, Sennouris and Tanta.
- 5 Ancylostoma hospitals Nos. 36, 37, 38, 39 and 40.
- 1 Ancylostoma branch at Menouf hospital.
- 3 Child welfare centres at Toukh, Kaliub, Shebin el Kanater, Zagazig, Suhag, and  
Damanhour, also dayas schools attached to each.
- 14 Child welfare centres at Minia el Kamh, Abo Kebir, Belbeis, Santa, Biala, Shebin  
el Kom, Ashmoun, Tala, Minshat Sabri, Embaba, Wasta, Beba, Manfalout  
and Kafr el Zayat.

TABLE NO. 97.—CONTRACTS AND ORDERS IN 1943

Kind of Work.	1943
General adjudications	276
Local offers	190
Contracts	320
Local orders	488
Foreign orders	18
Forms 50 C.G.	2,939
Questions submitted to the contract board	631
Contract board held	120
Tenders submitted in general adjudications	607
Miscellaneous orders	78
Agreements	5
Tenders submitted in local adjudications	832



**Appendix IV.**  
**DETAILS OF 1943-1944 BUDGET GRANTS AND EXPENDITURE**

TABLE No. 98.—DETAILS OF BUDGET GRANTS AND EXPENDITURE

	Budget Grants		Actual Expend.	
	1942	1943	1942	1943
	L.E.	L.E.	L.E.	L.E.
<i>Title I</i>				
Salaries, Wages and Allowances ... ..	965,100	931,434	935,642	901,547
<i>Title II</i>				
General Expenses ... ..	1,287,270	1,633,600*	1,132,227	1,632,133
<i>Title III</i>				
New Works ... ..	370,530	477,100†	78,591	335,912
<b>TOTAL ... ..</b>	<b>2,622,900</b>	<b>3,042,134</b>	<b>2,146,460</b>	<b>2,869,592</b>

\* By decree No. 14 of 1944, an additional credit was opened under Title II for the sum of L.E. 20,000 being an additional subsidy to Farouk I University, Alexandria, for the extension of its Faculty of Medicine.

† Two Additional credits were opened under Title III: one for the sum of L.E. 36,500 by Decree No. 96 of 1943 for the creation of a new Fever Hospital at Embaba; and another for the sum of L.E. 100,000 by Decree No. 72 of 1944 for the termination of the Malaria Campaign for which an additional credit was opened in 1943.

TABLE No. 99

	General Sections		Endemic Diseases Sections		Curative Medicine Sections		Preventive Medicine Sections		Social Medicine Sections		Central Admin.		Units		Total	
	1942	1943	1942	1943	1942	1943	1942	1943	1942	1943	1942	1943	1942	1943	1942	1943
<i>Technical Posts :—</i>																
Permanent ...	149	203	57	66	537	508	369	261	199	235	—	—	—	—	1,311	1,273
Temporary ...	81	87	141	166	198	263	383	295	153	186	—	—	—	—	956	997
<i>Adm. and Clerical Posts :</i>																
Permanent ...	—	—	—	—	—	—	—	—	—	—	291	353	175	195	466	548
Temporary ...	—	—	—	—	—	—	—	—	—	—	201	152	473	411	674	563
<i>Hors Cadre Staff. ...</i>	616	684	889	889	3,188	2,861	1,541	969	2,057	2,240	—	—	—	—	8,291	7,643
	648	974	1,087	1,121	3,923	3,632	2,293	1,525	2,409	2,661	492	550	648	606	11,698	11,024



## Appendix V.

### SUMMARY OF REPORT ON PUBLIC HEALTH IN ALEXANDRIA

TABLE No. 100 SHOWING THE NUMBER OF CASES AND DEATHS OF INFECTIOUS DISEASES, 1943

Diseases	No..of Cases	Deaths
Typhus Exanthematus	1 881	384
Cerebro-spinal Meningitis	31	18
Typhoid and Paratyphoid	943	143
Scarlet Fever	28	—
Diphtheria	531	140
Measles	582	120
Whooping Cough	96	5
Mumps	619	2
Malaria	1 469	26
Erysipelas	397	24
Tetanus	46	25
Pulmonary Tuberculosis	1 676	712
Chicken Pox	276	6
Influenza	4 218	9
Puerperal Sepsis	110	14
Dysentery	273	111
Acute Broncho-Pneumonia and Acute Lobar Pneumonia	2 355	1 764
Leprosy	12	2
Acute Poliomyelitis	1	—
Undulant Fever	—	—
Encephalitis Lethargica	—	—
Acute Polioencephalitis	1	1
Small Pox	123	16
Epidemic Jaundice	2	1
Dengue Fever	2	—
<b>TOTAL</b>	<b>15 672</b>	<b>3 523</b>

TABLE NO. 101 SHOWING NUMBER OF INHABITANTS, BIRTHS, DEATHS, AND INFANTILE MORTALITY 1943.

District	No. of Births						No. of Deaths						Infantile Mortality						Number of Inhabitants			
	Egyptians			Foreigners			Total			Egyptians			Foreigners			Total				Total		
	Male		Female	M.	F.	Total	Male		Female	M.	F.	Total	Male		Female	M.	F.	Total				
	Total		Total				Total															
	Male	Female	Male				Female	Male	Female				Male	Female								
Goumrok...	2 582	2 510	2	1	3	5 095	1 467	1 165	2	2 532	1	1	2	2 534	619	543	—	—	1 162	—	1 162	104 800
Manchieh	577	550	7	4	11	1 138	279	257	33	536	16	17	33	569	131	131	—	4	262	4	266	28 500
Labbane...	1 338	1 288	23	30	53	2 679	779	676	94	1 455	44	50	94	1 549	328	267	3	6	595	9	604	54 300
Attarine ...	1 426	1 271	21	17	38	2 735	1 360	894	136	2 254	57	79	136	2 390	280	274	6	5	554	11	565	59 600
Minet el-Bassal (A)	1 339	1 245	—	—	—	2 584	765	716	—	1 481	—	—	—	1 481	320	313	—	—	633	—	633	53 600
Minet-el-Bassal (B)	1 026	914	—	—	—	1 940	619	519	—	1 138	—	—	—	1 138	296	228	—	—	524	—	524	38 900
Karmouz (A)...	2 173	2 114	—	—	—	4 287	1 282	1 216	3	2 498	1	2	3	2 501	574	522	—	—	1 096	—	1 096	85 400
Karmouz (B)	2 920	2 647	7	6	13	5 580	1 535	1 356	1	2 891	—	1	1	2 892	693	485	—	—	1 178	—	1 178	87 600
Moharram Bey	1 634	1 529	420	431	851	4 014	1 367	955	238	2 322	113	125	238	2 560	386	306	10	8	692	18	710	51 200
Hadra ...	2 354	2 196	254	211	465	5 015	1 310	1 071	561	2 381	299	262	561	2 942	422	403	31	27	825	58	883	88 400
Ramleh (A)	1 631	1 595	5	5	10	3 236	888	851	80	1 739	54	26	80	1 819	338	336	1	—	674	1	675	64 800
Ramleh (B)	720	700	1	—	1	1 421	417	380	4	797	2	2	4	801	179	142	—	—	321	—	321	19 800
TOTAL ...	19 720	18 557	740	705	1 445	39 722	11 968	10 056	597	22 024	597	575	1 162	23 186	4 566	4 050	51	50	8 616	101	8 717	736 900



## Appendix VI—REPORT ON THE WORK OF CAIRO CITY HEALTH INSPECTORATE

*Population.*—The estimated mid-year population of Cairo in 1943 was 1,423,300

*Births.*—During the year, 76,343 births (excluding still births) were registered in Cairo with an increase of 10,888 births over the previous year or a birthrate of 53.6 per thousand of population.

### *Still Births :*

Some 1627 still births were recorded or a rate of 21.1 per thousand births as compared with 1530 in 1942.

### *Deaths :*

A total of 56,992 deaths were recorded in Cairo during the year. However 2193 of these were non residents of Cairo leaving 53,185 deaths for Cairo proper. This shows an increase of 1850 deaths over the previous year and gives an annual death rate of 37.4 per thousand of population as compared with 36.2 in 1942 ; 28.5 in 1941 ; 26.9 in 1940 ; 25.9 in 1939 and a mean death-rate of 26.6 for the quinquennial period ending 1941. Birth and death statistics for Cairo are shown in table No. 102.

### *Infantile Mortality :*

17,994 children under one year of age died in Cairo during 1943, with an increase of 1786 over the previous year or a ratio of 235.7 per thousand births for the whole City as compared with 247.6 in 1942 ; 197 in 1941 ; 196 in 1940 ; 190 in 1939 and a mean rate of 195.8 for the quinquennial period ending 1941.

### *Diseases Causing Infantile Mortality :*

Diarrhoea and enteritis are the principal diseases affecting young children. They were responsible for 10,141 deaths or 56.4 % of the deaths recorded amongst children under one year of age. General diseases come next with 4,211 deaths or 23.4 %. Marasmus and general debility caused 2,395 deaths or 13.3 %. 722 deaths or 4 % were due to chest diseases and 525 deaths or 2 % were due to infectious diseases.

### *Death Inquiries :*

The total number of uncertified deaths which required investigation was 30,774 or 57.9 % of Cairo deaths. District medical officers examined 10,808 or 35.5 % of the uncertified deaths. District Mowallidas examined 18,999 or 61.7 % and the remainder was examined by dayas and village sanitary barbers.

### *Infectious Diseases :*

A total of 27,771 cases of infectious diseases were notified during the year (excluding 2,668 cases from outside), as compared with 20,956 cases in 1942 ; 16,612 in 1941 ; 14,632 in 1940 ; 11,517 in 1939 and 12,342 in 1938. Cairo deaths from infectious diseases totalled 8,394 or a ratio of 15.8 % of total deaths as compared with 13.9 % in 1942 ; 11.5 % in 1941 ; 10.3 % in 1940 ; 7.5 % in 1939 and 8.4 % in 1938. Table No. 103 gives the number of cases and deaths of the most prevalent infectious diseases distributed according to qisms.

*Influenza :*

2240 cases of influenza with 20 deaths were notified during the year or a ratio of 1.6 and 0.014 per thousand of population as compared with 2002 cases and 941 deaths (a ratio of 1.4 and 0.003) in 1942 ; 1358 cases and 28 deaths (a ratio of .97 and .02) in 1941 ; 1851 cases and 30 death (a ratio of 1.3 and .02) in 1940 ; 1937 cases and 36 deaths (a ratio of .69 and .01) in 1939 and 1498 cases and 36 deaths (a ratio of 1.127 and .037 in 1938).

*Tuberculosis :*

A total of 3,345 cases with 1,777 deaths were notified during the year or a case-rate of 2.35 and a death-rate of 1.24 per thousand of population.

*Child Bearing Mortality.*

The number of deaths attributed to confinement was 93 or 1.4 per thousand births as compared with 1.92 in 1942, 2.5 in 1941, 2.2 in 1940 and 2.6 in 1939 and 1938. Puerperal fever was responsible for 40 of these deaths or a ratio of 0.51 per thousand births as against 0.55 in 1942, 0.9 in 1941, 0.8 in 1940, 0.7 in 1939, 0.9 in 1938 and 1.6 in 1937. 53 mothers died within a fortnight of confinement (excluding puerperal fever cases) as against 90 in 1942, 104 in 1941 and 117 in 1940. The following is the distribution of these deaths according to causes : 16 Eclampsia, 5 metrorrhagia before confinement, 2 metrorrhagia after confinement, 1 metrorrhagia during confinement, 3 heart failure, 4 septicæmia, 1 rupture of uterus ; 10 difficult labour 1 syncope, 4 placenta prævia and, 1 typhoid fever.

*Disinfection :*

The total number of rooms disinfected during 1943 was 416,750 of which 347,173 rooms were disinfected by Fom el Khalig disinfection station and the remaining 69,572 by Abbassia disinfection station.



TABLE No. 102.—THE POPULATION AND VITAL STATISTICS OF CAIRO AND ITS QUARTERS IN 1943  
WITH AVERAGE FIGURES FOR PREVIOUS YEARS

Districts	Population	Number of Deaths	Death-rate per 1000 of Population	Number of Births	Birth-rate per 1000 of Population	Number of Infantile deaths (0-1) year	Infantile Mortality rate per 1000 Births
Ezbekia ... ..	58,200	1,660	28·5	2,264	38·9	427	188·6
Abdine ... ..	90,900	2,445	26·9	3,127	34·4	740	236·6
Sayeda I ... ..	71,700	3,412	47·6	4,875	68·0	1,190	244·1
Sayeda II ... ..	68,000	2,273	33·4	2,909	42·8	825	283·6
Khalifa ... ..	80,300	3,574	44·5	4,215	52·5	1,210	287·1
Darb-el-Ahmar ... ..	88,600	3,491	39·4	4,730	53·4	1,276	269·7
Mousky ... ..	28,300	858	30·3	1,240	43·8	263	212·1
Bab-el-Sharia ... ..	95,900	3,407	35·5	5,0·9	52·8	1,164	231·1
Gamalia ... ..	82,200	3,215	39·1	4,667	56·8	1,195	256·1
Abbassia ... ..	127,800	3,955	30·9	6,759	52·9	1,263	186·9
Shoubra ... ..	95,300	3,471	36·4	5,951	62·4	1,202	202·0
Rod-el-Farag ... ..	131,000	4,291	32·8	6,810	51·9	1,461	214·5
Boulac I ... ..	83,800	4,755	56·7	6,151	73·4	1,522	247·4
Boulac II ... ..	54,700	2,126	38·9	2,871	52·5	705	245·6
Old Cairo ... ..	72,800	3,264	44·8	4,049	55·6	1,104	272·7
Heliopolis ... ..	56,800	1,448	25·5	2,149	37·8	400	186·1
Zeitoun ... ..	44,200	1,855	42·0	2,771	62·7	717	258·8
Helwan ... ..	53,200	2,001	37·6	2,762	51·9	712	257·8
Sharabia ... ..	39,600	1,684	42·5	2,984	75·4	618	207·1
<b>TOTAL FOR CAIRO ... ..</b>	<b>1,423,300</b>	<b>53,185</b>	<b>37·4</b>	<b>76,343</b>	<b>53·6</b>	<b>17,994</b>	<b>235·7</b>
<b>1942 ... ..</b>	<b>1,419,800</b>	<b>51,335</b>	<b>36·2</b>	<b>65,455</b>	<b>46·1</b>	<b>16,208</b>	<b>247·6</b>
<b>1941-1937 ... ..</b>	<b>6,828,400</b>	<b>181,557</b>	<b>26·6</b>	<b>296,940</b>	<b>43·5</b>	<b>58,148</b>	<b>195·8</b>
<b>1936-1932 ... ..</b>	<b>6,364,700</b>	<b>167,964</b>	<b>26·4</b>	<b>270,420</b>	<b>42·5</b>	<b>53,369</b>	<b>197·4</b>
<b>1931-1927 ... ..</b>	<b>5,365,400</b>	<b>156,855</b>	<b>29·2</b>	<b>242,277</b>	<b>45·2</b>	<b>53,228</b>	<b>219·7</b>
<b>1926-1922 ... ..</b>	<b>4,050,600</b>	<b>141,879</b>	<b>35·0</b>	<b>209,991</b>	<b>51·6</b>	<b>49,076</b>	<b>233·7</b>

TABLE No. 103.—DISTRICT DISTRIBUTION OF THE PRINCIPAL INFECTIOUS DISEASES IN 1943

Districts	Population	Small-pox		Relapsing fever		Cerebro-spinal fever		Typhus fever		Typhoid fever		Scarlet fever		Diphtheria		Measles		Totals		Tuberculosis		Malaria	
		Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Ezbekia	58,200	54	2	—	—	2	1	376	97	124	38	—	—	86	26	1	1	643	165	167	91	18	1
Abdine	90,900	83	5	—	—	6	—	329	73	186	32	4	—	131	31	9	3	748	144	209	94	30	1
Sayeda I	71,700	39	—	—	—	—	—	456	123	111	23	1	—	140	28	9	3	756	177	261	192	19	3
Sayeda II	68,000	57	2	—	—	2	2	438	66	143	21	4	—	122	42	14	7	780	140	174	120	15	—
Khalifa	80,300	31	1	—	—	4	—	454	88	83	15	—	—	127	33	10	6	709	143	221	131	9	—
Darb-el-Ahmar	88,600	80	5	—	—	1	—	628	114	106	20	—	—	175	48	27	15	1017	202	256	91	13	—
Mousky	28,300	24	1	—	—	—	—	128	39	42	7	—	—	32	10	5	1	231	58	54	27	6	—
Bab-el-Sharia	95,900	87	6	—	—	3	2	498	103	113	24	2	—	165	47	6	—	874	182	239	111	14	1
Gamalia	82,200	76	2	—	—	1	—	195	97	71	11	—	—	106	30	15	7	764	147	210	107	24	1
Abbassia	127,800	87	3	—	—	7	5	655	230	283	48	2	—	192	67	22	1	1,248	354	188	105	91	6
Shoubra	95,300	68	8	—	—	2	—	577	126	210	36	—	—	189	58	15	5	1,061	233	194	68	21	1
Rod-el-Farag	131,000	103	2	—	—	—	—	546	116	188	19	2	—	152	38	23	20	1,014	195	158	78	22	1
Boulac I	83,800	302	34	—	—	2	1	1112	279	105	20	—	—	124	23	15	2	1,667	364	341	179	26	1
Boulac II	54,700	42	3	—	—	1	—	320	57	46	11	—	—	56	18	1	—	466	89	116	61	8	—
Old Cairo	72,800	55	7	—	—	8	3	623	105	73	11	1	—	105	17	63	50	933	193	171	78	35	1
Heliopolis	56,800	27	—	—	—	2	1	404	68	153	24	6	—	78	23	5	—	675	116	93	42	182	3
Zeitoun	44,200	21	—	—	—	2	—	228	31	78	7	—	—	61	9	13	2	403	49	92	55	14	—
Helwan	53,200	26	—	—	—	1	—	136	24	42	9	—	—	37	11	8	1	250	45	135	108	12	—
Sharabia	39,600	21	2	—	—	2	2	237	32	46	8	—	—	56	14	10	3	372	61	66	39	12	—
TOTAL FOR CAIRO...	1,423,300	1283	83	—	—	46	17	8652	1868	2,203	384	22	—	2134	578	271	127	14,611	3,057	3,345	1,777	571	20



**TABLE No. 104.—DISTRIBUTION OF UNCERTIFIED DEATHS AND DEATH INQUIRIES IN THE VARIOUS DISTRICTS IN 1943**

Districts	All Deaths	Uncertified Deaths					Percentage of Uncertified Deaths
		Investigated by District M.Os.	Investigated by District Hakimas	Investigated by Village Sanitary Barbers	Investigated by Village Dâyas	District Totals	
Ezbekia ... ..	1,660	241	388	—	—	629	37·9
Abdine ... ..	2,45	545	1,365	—	—	1,910	78·1
Sayeda I ... ..	3,412	762	657	—	—	1,419	41·6
Sayeda II ... ..	2,273	498	787	—	—	1,285	56·5
Khalifa ... ..	3,574	1,172	1,517	—	—	2,689	75·2
Darb el-Ahmar ... ..	3,491	701	835	—	—	1,536	44·0
Mousky ... ..	858	195	227	—	—	422	49·2
Bab-el-Sharia ... ..	3,467	675	1,364	—	—	2,039	59·8
Gamalia ... ..	3,215	672	1,314	—	—	2,016	62·7
Abbassia ... ..	3,955	165	310	—	—	535	13·5
Shoubra ... ..	3,471	468	1,672	—	—	2,140	61·7
Rod-el-Farag ... ..	4,291	479	1,619	—	—	2,098	48·9
Boulac I ... ..	4,755	1,215	2,616	—	—	3,831	80·6
Boulac II ... ..	2,126	881	748	—	—	1,629	76·6
Old Cairo ... ..	3,264	830	1,569	209	17	2,625	80·4
Heliopolis ... ..	1,448	285	217	—	—	582	40·2
Zeitoun ... ..	1,855	382	516	3	—	891	48·0
Helwan ... ..	2,001	306	417	565	42	1,330	66·5
Sharabia ... ..	1,684	436	701	18	13	1,168	69·4
<b>TOTAL FOR CAIRO ... ..</b>	<b>53,185</b>	<b>10,908</b>	<b>18,909</b>	<b>795</b>	<b>72</b>	<b>30,774</b>	<b>57·9</b>

**TABLE No. 105.—ZYMOTIC DISEASES CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1943**

Districts	Population	Number of Cases recorded	Case rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case Mortality rates per cent
Ezbekia ... ..	58,200	643	11·048	165	2·835	25·7
Abdine ... ..	90,900	748	8·229	141	1·584	19·3
Sayeda I ... ..	71,700	756	10·544	177	2·469	23·4
Sayeda II ... ..	68,000	780	11·471	140	2·059	17·9
Khalifa ... ..	80,300	709	8·829	143	1·781	20·2
Darb-el-Ahmar ... ..	88,000	1,017	11·479	202	2·280	19·9
Mousky ... ..	28,300	231	8·163	58	2·049	25·1
Bab-el-Sharia ... ..	95,000	874	9·114	182	1·898	20·8
Gamalia ... ..	82,200	764	9·294	147	1·788	19·2
Abbassia ... ..	127,000	1,248	9·765	354	2·770	28·4
Shoubra ... ..	95,300	1,061	11·133	233	2·445	23·0
Rod-el-Farag ... ..	131,000	1,014	7·740	195	1·489	19·2
Boulac I ... ..	83,000	1,667	19·893	364	4·344	21·6
Boulac II ... ..	54,700	466	8·519	89	1·631	19·1
Old Cairo ... ..	72,800	933	12·86	193	2·651	20·7
Heliopolis ... ..	56,800	675	11·884	116	2·042	17·2
Zeitoun ... ..	44,200	403	9·118	49	1·109	12·2
Helwan ... ..	53,200	250	4·699	45	·846	18·0
Sharabia ... ..	39,600	372	9·394	61	1·540	16·4
<b>TOTAL FOR CAIRO</b>	<b>1,423,300</b>	<b>14,611</b>	<b>10·266</b>	<b>3,057</b>	<b>2·148</b>	<b>20·9</b>

TABLE NO. 106.—TYPHOID FEVER CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1943

Districts	Population	Number of Cases recorded	Case rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case Mortality rates per cent
Ezbekia ... ..	58,200	124	2.131	38	0.653	30.6
Abdine ... ..	90,000	186	2.046	32	0.352	17.2
Sayeda I ... ..	71,000	111	1.548	23	0.321	20.7
Sayeda II ... ..	68,000	143	2.03	21	0.309	14.7
Khalifa ... ..	80,300	83	1.034	15	0.187	18.1
Darb-el-Ahmar ...	88,600	106	1.96	20	0.226	18.9
Mousky ... ..	28,300	42	1.484	7	0.247	16.7
Bab-el-Sharia ...	95,000	113	1.178	24	0.250	21.2
Gamalia ... ..	82,200	71	.864	11	0.134	15.5
Abbassia ... ..	127,000	283	2.24	48	0.376	17.0
Shoubra ... ..	95,300	210	2.204	36	0.378	17.1
Rod-el-Farag ...	131,000	188	1.435	19	0.145	10.1
Boulac I ... ..	83,000	105	1.253	20	0.239	19.0
Boulac II ... ..	54,000	46	.841	11	0.201	23.9
Old Cairo ... ..	72,000	73	1.003	11	0.151	15.1
Heliopolis ... ..	56,800	153	2.694	24	0.423	15.7
Zeitoun ... ..	44,000	78	1.765	7	0.158	9.0
Helwan ... ..	53,200	42	.789	9	0.169	21.4
Sharabia ... ..	39,600	46	1.162	8	0.202	17.4
<b>TOTAL FOR CAIRO</b>	<b>1,423,300</b>	<b>2,203</b>	<b>1.548</b>	<b>384</b>	<b>0.270</b>	<b>17.4</b>

TABLE NO. 107.—TYPHUS CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1943

Districts	Population	Number of Cases recorded	Case rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case Mortality rates per cent
Ezbekia ... ..	58,200	376	6.460	97	1.667	25.8
Abdine ... ..	90,000	329	3.69	73	0.803	22.2
Sayeda I ... ..	71,700	456	6.30	123	1.715	27.0
Sayeda II ... ..	68,000	438	6.441	66	0.971	15.1
Khalifa ... ..	80,300	454	5.654	83	1.096	19.4
Darb-el-Ahmar ...	88,600	628	7.088	114	1.287	18.2
Mousky ... ..	28,300	128	4.533	39	1.378	30.5
Bab-el-Sharia ...	95,000	498	5.193	103	1.074	20.8
Gamalia ... ..	82,200	495	6.026	97	1.180	19.6
Abbassia ... ..	127,000	655	5.125	230	1.801	35.1
Shoubra ... ..	95,300	577	6.055	126	1.322	21.8
Rod-el-Farag ...	131,000	546	4.163	116	0.885	21.2
Boulac I ... ..	83,000	1,119	13.353	279	3.329	24.9
Boulac II ... ..	54,700	329	5.850	57	1.042	17.8
Old Cairo ... ..	72,000	628	8.626	105	1.442	16.7
Heliopolis ... ..	56,800	404	7.113	68	1.197	16.8
Zeitoun ... ..	44,000	228	5.153	31	0.701	13.6
Helwan ... ..	53,200	136	2.556	24	0.451	17.6
Sharabia ... ..	39,600	237	5.985	32	0.803	13.5
<b>TOTAL FOR CAIRO</b>	<b>1,423,300</b>	<b>8,652</b>	<b>6.079</b>	<b>1,868</b>	<b>1.312</b>	<b>21.6</b>



TABLE No. 103.—DIPHTHERIA CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1943

Districts	Population	Number of Cases recorded	Case rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case Mortality rates per cent
Ezbekia ... ..	58,200	86	1.478	26	0.447	30.2
Abdine ... ..	90,900	131	1.441	31	0.341	23.7
Sayeda I ... ..	71,700	140	1.953	28	0.391	20.0
Sayeda II ... ..	68,000	122	1.794	42	0.618	34.4
Khalifa ... ..	80,300	127	1.582	33	0.411	26.0
Darb-el-Ahmar ...	88,600	175	1.975	48	0.542	27.4
Mousky ... ..	28,300	32	1.131	10	0.353	31.3
Bab-el-Sharia ...	95,900	185	1.721	47	0.490	28.5
Gamalia ... ..	82,200	106	1.290	30	0.365	28.3
Abbassia ... ..	127,800	192	1.502	67	0.524	34.9
Shoubra ... ..	95,300	189	1.983	53	0.609	30.7
Rod-el-Farag ...	131,000	152	1.160	38	0.290	25.0
Boulac I ... ..	83,800	124	1.480	28	0.334	22.6
Boulac II ... ..	54,700	56	1.024	18	0.329	32.1
Old Cairo ... ..	72,800	105	1.442	17	0.234	16.2
Heliopolis ... ..	56,800	78	1.373	23	0.405	29.5
Zeitoun ... ..	44,200	61	1.380	9	0.204	14.8
Helwan ... ..	53,200	37	.695	11	0.207	29.7
Sharabia ... ..	39,600	96	1.414	14	0.354	25.0
<b>TOTAL FOR CAIRO</b>	<b>1,423,300</b>	<b>2,134</b>	<b>1.499</b>	<b>578</b>	<b>0.406</b>	<b>27.1</b>

TABLE No. 109.—SMALL POX CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1943

Districts	Population	Number of Cases recorded	Case rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case Mortality rates per cent
Ezbekia ... ..	58,200	54	.928	2	0.034	3.7
Abdine ... ..	90,900	83	.913	5	0.055	6.0
Sayeda I ... ..	71,700	39	.544	—	—	—
Sayeda II ... ..	68,000	57	.838	2	0.029	3.5
Khalifa ... ..	80,300	31	.386	1	0.012	3.2
Darb-el-Ahmar ...	88,600	80	.903	5	0.056	6.3
Mousky ... ..	28,300	24	.848	1	0.035	4.2
Bab-el-Sharia ...	95,900	87	.907	6	0.063	6.9
Gamalia ... ..	82,200	76	.925	2	0.024	2.6
Abbassia ... ..	127,800	87	.681	3	0.023	3.4
Shoubra ... ..	95,300	68	.714	8	0.084	11.8
Rod-el-Farag ...	131,000	103	.786	2	0.015	19.4
Boulac I ... ..	83,800	392	3.604	34	0.406	9.9
Boulac II ... ..	54,700	42	.768	3	0.055	7.1
Old Cairo ... ..	72,800	55	.755	7	0.096	12.7
Heliopolis ... ..	56,800	27	.475	—	—	—
Zeitoun ... ..	44,200	21	.475	—	—	—
Helwan ... ..	53,200	56	.489	—	—	—
Sharabia ... ..	39,600	21	.530	2	.0.51	9.5
<b>TOTAL FOR CAIRO</b>	<b>1,423,300</b>	<b>1,283</b>	<b>.901</b>	<b>83</b>	<b>0.</b>	<b>6.2</b>

**TABLE No. 110.—MEASLES CASE AND DEATH RATES IN  
CAIRO DISTRICTS IN 1943**

Districts	Population	Number of Cases recorded	Case rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case Mortality Rates Per Cent
Ezbekia ... ..	58,200	1	·017	1	0·017	100·0
Abdine ... ..	90,900	9	·099	3	0·033	33·3
Sayeda I ... ..	71,700	9	·126	3	0·042	33·3
Sayeda II ... ..	68,000	14	·206	7	0·103	50·0
Khalifa ... ..	80,300	10	·125	6	0·075	60·0
Darb-el-Ahmar	88,600	27	·305	15	0·169	55·6
Mousky ... ..	28,300	5	·177	1	0·035	20·0
Bab-el-Sharia ...	95,900	6	·0 3	—	—	—
Gamalia ... ..	82,200	15	·182	7	0·085	46·7
Abbassia ... ..	127,800	22	·172	1	0·003	4·5
Shoubra ... ..	95,300	15	·157	5	0·052	33·3
Rod-el-Farag ...	131,000	23	·176	20	0·153	87·0
Boulac I ... ..	83,800	15	·179	2	0·024	13·3
Boulac II ... ..	54,700	1	·0 8	—	—	—
Old Cairo ... ..	72,800	63	·865	50	0·687	79·4
Heliopolis ... ..	56,800	5	·088	—	—	—
Zeitoun ... ..	44,200	13	·204	2	0·045	15·4
Helwan ... ..	53,200	8	·150	1	0·019	12·5
Sharabia ... ..	39,600	19	253	3	0·076	30·0
<b>TOTAL FOR CAIRO</b>	<b>1,423,300</b>	<b>271</b>	<b>·190</b>	<b>127</b>	<b>0·089</b>	<b>46·9</b>

**TABLE No. 111.—CEREBRO SPINAL FEVER CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1943**

Districts	Population	Number of Cases recorded	Case rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of population	Case Mortality Rates per cent
Ezbekia ... ..	58,200	2	0·034	1	0·017	50·0
Abdine ... ..	90,900	6	0·066	—	—	—
Sayeda I ... ..	71,700	—	—	—	—	—
Sayeda II ... ..	68,000	2	0·294	2	0·294	100·0
Khalifa ... ..	80,300	4	0·050	—	—	—
Darb-el-Ahmar	88,600	1	0·011	—	—	—
Mousky ... ..	28,300	—	—	—	—	—
Bab-el-Sharia ...	95,900	3	0·031	2	0·021	66·7
Gamalia ... ..	82,200	1	0·012	—	—	—
Abbassia ... ..	127,800	7	0·055	5	0·039	71·4
Shoubra ... ..	95,300	2	0·021	—	—	—
Rod-el-Farag ...	131,000	—	—	—	—	—
Boulac I ... ..	83,800	2	0·024	1	0·012	50·0
Boulac II ... ..	54,700	1	0·018	—	—	—
Old Cairo ... ..	72,800	8	0·110	3	0·041	37·5
Heliopolis ... ..	56,800	2	0·035	1	0·018	50·0
Zeitoun ... ..	44,200	2	0·045	—	—	—
Helwan ... ..	53,200	1	0·019	—	—	—
Sharabia ... ..	39,600	2	0·051	2	0·051	100·0
<b>TOTAL FOR CAIRO</b>	<b>1,423,300</b>	<b>46</b>	<b>0·032</b>	<b>17</b>	<b>0·012</b>	<b>37·0</b>



TABLE No. 112.—SCARLET FEVER CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1943

Districts	Population	Number of Cases recorded	Case rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case-Mortality Rates per cent
Ezbekia ... ..	58,200	—	—	—	—	—
Abdine ... ..	90,900	4	0.044	—	—	—
Sayeda I ... ..	71,700	1	0.014	—	—	—
Sayeda II ... ..	68,000	4	0.059	—	—	—
Khalifa ... ..	80,300	—	—	—	—	—
Darb-el-Ahmar ...	88,600	—	—	—	—	—
Mousky ... ..	28,300	—	—	—	—	—
Bab-el-Sharia ...	95,900	2	0.021	—	—	—
Gamalia ... ..	82,200	—	—	—	—	—
Abbassia ... ..	127,800	2	0.016	—	—	—
Shoubra ... ..	95,300	—	—	—	—	—
Rod-el-Farag ...	131,000	2	0.015	—	—	—
Boulac I ... ..	83,800	—	—	—	—	—
Boulac II ... ..	54,700	—	—	—	—	—
Old Cairo ... ..	72,800	1	0.014	—	—	—
Heliopolis ... ..	56,800	6	0.106	—	—	—
Zeitoun ... ..	44,200	—	—	—	—	—
Helwan ... ..	53,200	—	—	—	—	—
	39,600	—	—	—	—	—
<b>TOTAL FOR CAIRO</b>	<b>1,423,300</b>	<b>22</b>	<b>1.015</b>	—	—	—

TABLE No. 113.—MALARIA CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1943

Districts	Population	Number of Cases recorded	Case rates per 1000 of population	Number of malignant cases	Death-rates per 1000 of population	Case mortality rates per cent
Ezbekia ... ..	58,200	18	.309	10	.172	55.6
Abdine ... ..	90,900	30	.330	8	.088	26.7
Sayeda I. ... ..	71,700	19	.265	6	.084	31.6
Sayeda II ... ..	68,000	15	.221	8	.118	53.3
Khalifa ... ..	80,300	9	.112	1	.012	11.1
Darb el Ahmar ...	88,600	13	.147	—	—	—
Mousky ... ..	28,300	6	.212	4	.141	66.7
Bab el Sharia ...	95,900	14	.146	4	.042	28.6
Gamalia ... ..	82,200	24	.292	5	.061	20.8
Abbassia ... ..	127,800	91	.712	19	.149	20.9
Shoubra ... ..	95,300	21	.220	7	.073	33.3
Rod el Farag ...	131,000	22	.168	6	.049	27.3
Boulac I. ... ..	83,800	26	.310	14	.167	53.8
Boulac II. ... ..	54,700	8	.146	2	.037	25.0
Old Cairo ... ..	72,800	35	.481	1	.014	2.9
Heliopolis ... ..	56,800	182	3.204	22	.387	12.1
Zeitoun ... ..	44,200	14	.317	—	—	—
Helouan ... ..	53,200	12	.226	—	—	—
Sharabia ... ..	39,600	12	.303	3	.076	25.0
<b>TOTAL FOR CAIRO</b>	<b>1,423,300</b>	<b>571</b>	<b>.401</b>	<b>120</b>	<b>.084</b>	<b>.021</b>

FEVER HOSPITAL, ABBASSIA

The number of admissions to the Abbassia Fever Hospital during the last three years, including persons accompanying patients was :

**1941...** ... 13,474

**1942...** ... 15,989.

**1943...** ... 23,251

The number of admissions during the year 1943 was 18,029 (of these 2,479 died). The remainder *i.e.*, 5,222 were persons accompanying patients.

Table No. 113 gives details of infectious diseases isolated during 1943. The following tables deal with some of these diseases separately.



TABLE No. 114 GOVERNMENT FEVER HOSPITAL, ABBASSIA, 1943

1943													
Diseases	Cases admitted 1942		Cases admitted within 3 days		Cases Admit. within 4 days		Cases Admit. after 7 days		O. sent by health Offices	O. S. by hospitals	C. S. by private practitioners	C. Adm. at their own request	
	Adm.	D.	Adm.	D.	Adm.	D.	Adm.	D.					
Typhus	2,209	517	8,468	1,522	690	102	3,250	575	4,748	12,52	1,550	918	
Small-pox	—	—	1,514	75	118	8	857	35	762	559	168	25	
Plague	—	—	1	—	—	—	1	—	1	—	—	—	
Typhoid	2,060	310	1,112	150	105	23	448	52	287	392	304	129	
Para-Typhoid	618	43	341	10	58	1	124	4	140	109	65	27	
Diphtheria	892	313	1,171	404	412	107	530	189	331	350	293	197	
Pneumonia	553	127	262	83	66	18	115	35	73	68	69	52	
Influenza	1,943	—	2,856	6	1,328	2	1,052	1	1,316	1,204	115	221	
Scarlet-Fever	3	—	3	—	2	—	1	—	—	1	2	—	
Measles	180	18	67	8	28	1	28	6	25	25	8	9	
Chicken-Pox	41	—	82	—	53	—	23	—	42	29	6	5	
Cerebro-Spinal F.	140	82	32	13	11	4	14	6	4	14	11	3	
Whooping Cough	20	3	17	1	1	1	—	—	5	5	5	2	
Tetanus	55	26	71	32	30	17	20	9	8	45	15	3	
Puerperal F.	12	3	40	5	9	—	11	1	5	29	2	4	
Dysentery	52	5	32	3	5	1	11	—	7	15	4	6	
Erysipelas	638	27	286	20	130	2	110	10	73	92	40	81	
Other Diseases	1,627	65	1,674	147	503	22	521	38	485	682	225	282	
TOTAL	10,943	1,391	18,029	2,479	3,549	309	7,116	961	8,312	4,871	2,288	1,964	

TABLE NO. 115—AGE AND SEX DISTRIBUTION OF CEREBRO SPINAL FEVER CASES AND DEATHS

Age	Male			Female			Total			Sample of C.S.F.		Swab from throat	
	No. of cases	No. of deaths	Rate per cent	No. of cases	No. of deaths	Rate per cent	No. of cases	No. of deaths	Rate per cent	Positive	Negative	Positive	Negative
Less than one year ... ..	4	2	50	1	1	100	5	3	60	1	4	—	5
1—2 years ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
2—5 „ ... ..	1	—	0	1	—	0	2	—	0	1	1	—	2
5—10 „ ... ..	2	—	0	4	—	0	6	—	0	4	2	—	6
10—15 „ ... ..	2	—	0	1	—	0	3	—	0	3	—	—	3
15—25 „ ... ..	2	—	0	2	1	50	4	1	25	3	1	—	4
25—35 „ ... ..	3	1	33	3	3	100	6	4	66	3	3	—	6
35—45 „ ... ..	2	2	100	1	1	100	3	3	100	3	—	—	3
45—55 „ ... ..	1	1	100	—	—	0	1	1	100	—	1	—	—
55—65 „ ... ..	2	1	50	—	—	0	2	1	50	1	1	—	2
More than 65 years ... ..	—	—	—0	—	—	0	—	0	0	—	—	—	—
TOTAL ... ..	19	7	36.6	13	6	46.7	32	13	40.6	19	13	—	32

TABLE NO. 116.—AGE AND SEX DISTRIBUTION OF TYPHUS CASES AND DEATHS

Age	MALE			FEMALE			TOTAL		
	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate
			%			%			%
Less than 1 year ... ..	5	3	60	3	2	66	8	5	62.5
1—2 years. ... ..	36	3	8.3	59	5	8.3	95	8	8.3
2—5 „ ... ..	81	6	7.3	124	6	5	205	12	6
5—10 „ ... ..	201	6	3	203	8	4	404	14	3.6
10—15 „ ... ..	482	12	2.6	315	20	6.3	797	32	4
15—25 „ ... ..	2,050	240	11.5	910	68	7.5	2,960	308	10.3
25—35 „ ... ..	1,454	370	25.4	925	127	13.7	2,379	497	20.9
35—45 „ ... ..	663	223	35.1	300	94	31.3	963	317	33
45—55 „ ... ..	265	132	50	173	69	40	443	201	48
55—65 „ ... ..	72	62	80	47	24	53	119	86	73
More than 65 years ... ..	34	24	80	31	18	60	65	42	70
TOTAL ... ..	5,373	1,081	20.1	3,055	441	14.3	8,428	1,522	17.8

No. of samples for Wail Felix.

Positive ... .. 7,904 Neg. ... .. 564

No. of cases received 3 injections of vaccine before one month:—

6.....No. Deaths Nil.



TABLE NO. 117—AGE AND SEX DISTRIBUTION OF DIPHTHERIA CASES AND DEATHS

AGE	MALE PTS.			FEMALE PTS.			TOTAL			SWAB		Took 3 inj. before 1 month		
	No. of Cases	No. of Deaths	Mor- tality Rate	No. of Cases	No. of Deaths	Mor- tality Rate	No. of Cases	No. of Deaths	Mor- tality Rate	Pos.	Neg.	No. of Cases	No. of Deaths	Mor- tality Rate
			%			%			%					%
Less than 1 years	26	15	57.9	18	8	28.6	44	23	52.3	28	16	—	—	—
1-2 ... year	62	35	56.3	44	32	72.7	106	67	63.2	66	40	36	3	8.3
2-5 ... „	392	128	32.6	325	116	35.7	717	244	34	435	282	162	21	12.9
5-10 ... „	108	32	29.9	102	33	32.3	210	65	30.9	118	92	54	3	5.6
10-15 ... „	36	2	5.5	25	2	8	61	4	6.9	45	16	—	—	—
15-25 ... „	12	1	8.3	8	—	—	20	1	5	13	7	—	—	—
25-35 ... „	—	—	—	6	—	—	6	—	—	5	1	—	—	—
35-45 ... „	4	—	—	—	—	—	4	—	—	4	—	—	—	—
45-55 ... „	—	—	—	2	—	—	2	—	—	2	—	—	—	—
55-65 ... „	1	—	—	—	—	—	1	—	—	1	—	—	—	—
More than 65,,	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ...	641	213	33	530	191	36	1,171	404	34.5	717	454	252	27	10.7

No. of Carriers ..., 0.

TABLE NO. 118—AGE AND SEX DISTRIBUTION OF PNEUMONIA CASES AND DEATHS

Age	Male			Female			Total			Lobar PN.	Broncho PN.
	No. of Cases	No. of Deaths	Rate per cent	No. of Cases	No. of Deaths	Rate per cent	Ns. of Cases	No. of Deaths	Rate per cent		
Less than 1 year	6	3	50	6	3	50	12	6	50	6	6
1- 2 ... years	12	5	41.6	9	4	44.4	21	9	43	9	12
2- 5 ... „	16	5	31.2	3	1	33	19	6	31.5	4	15
5-10 ... „	15	3	20	6	1	16.6	21	4	19	6	15
10-15 ... „	18	3	16.6	7	1	14.3	25	4	16	7	18
15-25 ... „	23	5	21.7	12	2	16.6	35	7	20	20	15
25-35 ... „	33	8	24.2	18	3	16.6	51	11	21.5	23	28
35-45 ... „	24	8	33	9	5	55.5	33	13	39.3	18	15
45-55 ... „	21	6	26.6	6	5	83.3	27	11	40.7	15	12
55-65 ... „	9	5	55.5	—	—	—	9	5	55.5	4	5
More than 65 „	9	7	77.7	—	—	—	9	7	77.7	3	6
TOTAL	186	58	30.1	76	25	32.9	262	83	31.7	115	147





TABLE NO. 120—AGE AND SEX DISTRIBUTION OF SMALL-POX CASES AND DEATHS

Age	Male			Female			Total			Not Vaccinated in Infancy		
	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate
			%			%			%			%
Less than 1 year	22	6	27.2	17	10	5.8	39	16	41	39	16	41
1-2 years ...	6	1	16.6	1	1	100	7	2	28.5	2	2	100
2-5 „ ...	13	2	15.3	3	3	100	16	5	31.2	5	5	100
5-15 „ ...	63	2	3.1	26	—	—	89	2	2.2	8	2	25
15-25 „ ...	611	7	1.1	85	2	2.2	696	9	1.2	16	2	12.5
25-35 „ ...	340	15	4.4	93	—	—	433	15	3.4	16	3	18.7
35-45 „ ...	143	9	6.3	46	6	13.4	189	15	7.8	9	2	22.2
45-55 „ ...	16	3	18.3	21	2	9.5	37	5	13.5	11	3	27.2
55-65 „ ...	4	3	75	1	1	100	5	4	80	2	2	100
More than 65 years ...	1	1	100	2	1	50	3	2	66.6	—	—	—
<b>TOTAL ...</b>	<b>1219</b>	<b>49</b>	<b>4</b>	<b>295</b>	<b>26</b>	<b>8.8</b>	<b>1,514</b>	<b>75</b>	<b>4.8</b>	<b>108</b>	<b>37</b>	<b>34.2</b>

Age	Vaccinated one year ago			Vaccinated 1-3 years ago		
	No. of cases	No. of deaths	Mortality Rate	No. of cases	No. of deaths	Mortality Rate
			%			%
Less than one year ...	—	—	—	—	—	—
1- 2 years ...	4	—	—	1	—	—
2- 5 „ ...	6	—	—	5	—	—
5-15 „ ...	31	—	—	50	—	—
15-25 „ ...	292	1	.3	398	6	1.5
25-35 „ ...	169	2	1.2	248	10	.4
35-45 „ ...	78	2	2.5	102	11	10.8
45-55 „ ...	7	—	—	19	2	10.5
55-65 „ ...	—	—	—	3	2	66.6
More than 65 years ...	—	—	—	3	2	66.6
<b>TOTAL ...</b>	<b>587</b>	<b>5</b>	<b>.8</b>	<b>819</b>	<b>33</b>	<b>4</b>

PLAGUE

Age ... ..From 35-45 years

No. of Cases ... .. 1

Sex ... .. Male

No. of cultures ... .. 1 pos.

No. of Swabs ... .. 1 pos.

Sent by a Health office on the 4th day.

TABLE NO. 121.—AGE AND SEX DISTRIBUTION OF PARATYPHOID CASES AND DEATHS

AGE	MALE			FEMALE			TOTAL			Samples of Widal		Took 2 inj. before one month		
	No. of Cases	No. of Deaths	Mor- tality Rate	No. of Cases	No. of Deaths	Mor- tality Rate	No. of Cases	No. of Deaths	Mor- tality Rate	Pos.	Neg.	No. of Cases	No. of Deaths	Mor- tality Rate
			%			%			%					%
Less than 1 year	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1- 2 ...years	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2- 5 ... „	7	—	—	5	—	—	12	—	—	12	—	—	—	—
5-10 ... „	12	—	—	8	—	—	20	—	—	20	—	—	—	—
10-15 ... „	38	1	5.5	16	—	—	34	1	2.9	34	—	2	—	—
15-25 ... „	93	3	3.2	29	—	—	122	3	2.4	119	3	26	—	—
25-35 ... „	73	2	2.7	18	1	5.5	91	3	3.2	89	2	17	—	—
35-45 ... „	24	—	—	13	—	—	37	—	—	37	—	12	—	—
45-55 ... „	12	1	8.3	5	1	20	17	2	11.7	17	—	5	1	20
55-65 ... „	5	1	20	2	—	—	7	1	14.3	7	—	—	—	—
More than 65 „	1	—	—	—	—	—	—	—	—	1	—	—	—	—
TOTAL ...	245	8	2.6	96	2	2.1	340	10	2.8	336	5	62	1	1.6

A.—1. No. of cases admitted within 3 days 58

2. „ „ „ 4-7 days 124

3. „ „ „ after 7 days 159

B.—1. No. of cases sent by health offices 140

2. „ „ „ hospitals 109

3. „ „ „ Private Practitioners 65

4. „ „ „ who came by themselves 27



TABLE NO. 122—AGE AND SEX DISTRIBUTION OF DYSENTERY CASES AND DEATHS

Age	Amœbic								
	Male			Female			Total		
	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate
			%			%			%
Less than 1 year ...	—	—	—	—	—	—	—	—	—
1-2 years ...	—	—	—	—	—	—	—	—	—
2-5 „ ...	—	—	—	—	—	—	—	—	—
5-10 „ ...	1	—	—	—	—	—	1	—	—
10-15 „ ...	1	—	—	—	—	—	1	—	—
15-20 „ ...	13	—	—	—	—	—	13	—	—
25-35 „ ...	8	1	12.5	—	—	—	8	1	12.5
35-45 „ ...	2	—	—	—	—	—	2	—	—
45-55 „ ...	2	1	50	1	—	—	3	1	33.3
55-65 „ ...	1	—	—	—	—	—	1	—	—
More than 65 years ...	1	—	—	—	—	—	1	—	—
TOTAL ...	29	2	6.7	1	—	—	30	2	26.6

Age	Bacillary								
	Male			Female			Total		
	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate
			%			%			%
Less than 1 year ...	—	—	—	—	—	—	—	—	—
1-2 years ...	—	—	—	—	—	—	—	—	—
5-10 „ ...	—	—	—	—	—	—	—	—	—
10-15 „ ...	—	—	—	—	—	—	—	—	—
15-25 „ ...	—	—	—	—	—	—	—	—	—
25-35 „ ...	—	—	—	—	—	—	—	—	—
35-45 „ ...	—	—	—	—	—	—	—	—	—
45-55 „ ...	—	—	—	—	—	—	—	—	—
55-65 „ ...	—	—	—	2	1	50	2	1	50
More than 65 years ...	—	—	—	—	—	—	—	—	—
TOTAL ...	—	—	—	2	1	50	2	1	50

TABLE NO. 123—AGE AND SEX DISTRIBUTION OF ERYSIPELAS CASES AND DEATHS

Age	MALES			FEMALES			TOTAL		
	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate
			%			%			%
Less than 1 year...	10	—	—	10	1	10	20	1	—
1- 2 years ...	3	—	—	1	—	—	4	—	—
2- 5 „ ...	5	1	20	7	—	—	12	1	8.3
5-10 „ ...	5	—	—	2	—	—	7	—	—
10-15 „ ...	15	1	6.7	7	2	2.8	22	3	3.6
15-25 „ ...	48	—	—	12	—	—	60	—	—
25-35 „ ...	41	2	4.8	15	1	6.7	56	3	5.3
35-45 „ ...	30	3	10	26	3	11.5	56	6	10.6
45-55 „ ...	18	—	—	9	3	33.3	27	3	11.1
55-65 „ ...	11	1	9	5	1	20	16	2	12.5
More than 65 years	2	—	—	4	1	25	6	1	17
TOTAL ...	188	8	4.3	98	12	12.2	286	20	7.1

#### 4.—Passengers :

During 1943, there were 13,740 passengers who arrived from infected countries as compared with 11,893 in 1942.

Of this total, 668 passengers arrived *via* Suez, 6775 *via* Kantara, 1299 by car *via* Ismailia, and 4992 passengers arrived by air of whom four landed at Luxor.

Besides, 10846 passengers arriving from the Sudan through Shellal were observed for Small-Pox, Meningitis and Yellow Fever.

All the Passengers, with the exception of 54 who could not be traced, were observed during the regulation period giving a ratio of 99.5 % observed.

#### Pilgrims :

The total number of returning pilgrims during the year 1362 H. (1943) was 5456 as compared with 945 in 1942.

All pilgrims were observed for the regulation period and were found in good health with the exception of 7 pilgrims who developed suspected fever during observation. The final diagnosis of these cases was as follows :

- 1 Intestinal inflammation.
- 1 Paratyphoid.
- 1 High blood pressure and haemorrhage.
- 1 Small Pox.
- 3 Influenza.

The result of bacteriological examination of these cases was negative.

Of the 5446 pilgrims proceeding to the Hedjaz, 13 did not return. 11 remained in the Hedjaz and 2 died. Besides 40 pilgrims non residents of Cairo and 53 foreign pilgrims were also observed and found in good health.

Officials and employees of the Lazaret numbering 229 were observed and found in good health.



TABLE No.124.—RESULT OF OBSERVATION OF PASSENGERS ARRIVING IN CAIRO FROM INFECTED COUNTRIES DURING THE YEAR 1943

Month	Via Alexandria				Via Port-Saïd				Via Suez				Via Kantara				By Air				By Car Via Ismailia				Total			
	Total	Found	Not found	Percentage found	Total	Found	Not found	Percentage found	Total	Found	Not found	Percentage found	Total	Found	Not found	Percentage found	Total	Found	Not found	Percentage found	Total	Found	Not found	Percentage found				
				%				%				%				%				%				%				
January ...	—	—	—	—	6	6	—	100	634	627	7	98,8	273	274	—	100	69	69	—	100	1,259	975	7	98,3				
February ...	—	—	—	—	—	—	8	100	581	576	5	99	285	285	—	100	88	88	—	100	962	957	5	99,4				
March ...	—	—	—	—	—	—	32	100	657	650	7	98,9	324	324	—	100	111	111	—	100	1,124	1,117	7	99,3				
April ...	—	—	—	—	—	—	66	100	1278	1265	13	98,9	319	319	—	100	142	142	—	100	1,805	1792	13	99				
May ...	—	—	—	—	—	—	119	98,9	750	743	7	99	301	301	—	100	89	89	—	100	1,259	1,250	9	99,1				
June ...	—	—	—	—	—	—	71	100	526	524	2	99,5	304	304	—	100	60	60	—	100	961	959	2	99,7				
July ...	—	—	—	—	—	—	140	91	447	447	—	100	406	405	1	99,5	31	31	—	100	1,024	1,019	5	99,5				
August ...	—	—	—	—	—	—	90	100	328	328	—	100	482	481	1	97,9	53	53	—	100	953	952	1	99,8				
September ...	—	—	—	—	—	—	26	100	450	450	—	100	547	547	—	100	161	160	1	99,3	1,184	1,183	1	99,9				
October ...	—	—	—	—	—	—	56	94,6	367	367	—	100	628	628	—	100	235	235	—	100	1,286	1,283	3	99,1				
November ...	—	—	—	—	—	—	48	97,9	367	361	—	100	552	552	—	100	114	114	—	100	1,081	1,080	1	99,9				
December ...	—	—	—	—	—	—	12	100	390	390	—	100	571	571	—	100	146	146	—	100	1,119	1,119	—	100				
TOTAL ...	—	—	—	—	6	658	10	98,5	6,775	6,734	41	99,5	4,992	4990	2	99,9	1299	1298	1	99,9	13,740	13,586	54	99,5				

TABLE No 125—STATISTICS OF PILGRIMS RETURNING TO CAIRO DURING 1943 (1362 H.)

Districts	Number of pilgrims left for Hedjaz this year	Number of Pilgrims returned						Difference between the number of those left and those returned			Number of those died at Hedjaz	Number of those died at home			Number of contraventions	Steps taken
		In good health	Found Sick				Observed	Not traced	Reasons for not tracing	Increase	Decrease	Reasons of increase or decrease	Number	Direct cause of death		
			Number	Suspected diseases	Result of bacter. examination	Diagnosis										
Abbassia	481	481	—	—	—	—	481	—	—	—	—	—	—	—	—	—
Abdine	556	555	1	Fever	Neg.	—	555	—	—	—	1	—	—	—	—	—
Ezbekia	141	141	—	—	—	—	141	—	—	—	—	—	—	—	—	—
Shoubra	209	209	—	—	—	—	209	—	—	—	—	—	—	—	—	—
Rod el Farag	307	307	—	—	—	—	307	—	—	—	—	—	—	—	—	—
Sharabia	45	45	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Boulac I.	282	282	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Boulac II.	243	243	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Darb el Ahmar	573	570	2	Fever	Neg.	—	570	—	—	—	3	—	—	—	—	—
Khalifa	228	219	—	—	—	—	219	—	—	—	9	—	—	—	—	—
Mousky	171	171	—	—	—	—	171	—	—	—	—	—	—	—	—	—
Gamalia	542	542	—	—	—	—	542	—	—	—	—	—	—	—	—	—
																Admitted to F.H., cured and discharged.
Bab el Sharia	413	412	1	Fever	Neg.	—	412	—	—	—	1	—	—	—	—	—
Sayed I.	297	298	—	—	—	—	298	—	2	—	1	—	—	—	—	—
Sayed II.	296	296	—	—	—	—	296	—	1	—	1	—	—	—	—	—
Heliopolis	174	174	—	—	—	—	174	—	—	—	—	—	—	—	—	—
Old Cairo	176	175	1	Fever	Neg.	—	175	—	—	—	1	—	—	—	—	—
																Admitted to F.H., cured and discharged.
Zeitoun	183	181	1	Fever	Neg.	—	181	—	—	—	2	—	—	—	—	—
Helwan	149	148	1	Fever	Neg.	—	148	—	—	—	1	—	—	—	—	—
TOTAL	5,466	5,449	7	—	—	—	5,449	—	—	3	20	—	—	—	2	—

REMARKS ... 1—53 Foreign pilgrims observed and found in good health.  
2— 40 pilgrims from other districts observed and found in good health.  
3—229 Officials and employees of El Tor Mission observed and found in good health.



## SANITARY CONTROL OF PUBLIC WOMEN

The total number of Registered Prostitutes for the year 1943 was 771. Of these, 140 were struck off the register during the year.

The total number of examinations held was 32,330.

91 prostitutes were found suffering from venereal diseases.

The number of arrested women was 4319, compared with 2624 in the year 1942. The incidence of disease amongst them was as follows :

Acute Genorrhoea	...	...	6
Chronic	„	...	408
Primary Syphilis	...	...	32
Secondary	„	...	315
Soft chancre	...	...	68
Scabies	...	...	2
Venereal warts	...	...	1
TOTAL			832

### *Wassermann Examination of the blood.*

Prostitutes : 79 specimens were found positive from 642 :

Arrested women : 259 specimens found positive from 984.

## Police Health Office

The strength of Cairo Police in 1943 was 10,598 men of all ranks.

The following is a short description of the work carried out by this office during the year.

### *Medical Work*

Policemen examined for sick-leaves	...	...	702
Other police personnel examined for sick leaves	...	...	877
Medico-legal reports	...	...	33482
Persons stung by scorpions and received first aid injections	...	...	795
Motor car drivers and cabmen examined for practising professions	...	...	4740

### *Sanitary Work*

Inspection of police units	...	...	12
Number of men vaccinated against small-pox	...	...	5931
Number of men vaccinated against typhoid (two injections)...	...	...	1193

It was observed that the most prevalent diseases among non commissioned officers and policemen were : rheumatism, bronchitis, enteritis, intestinal colic, and piles. The number of cases of these diseases were 517, 476, 472, 448 and 413 respectively.

The diseases most prevalent among officers and civilians were : bronchitis, rheumatism, tonsillitis, gastritis and enteritis. The number of cases of these diseases were : 131, 65, 64, 45 and 44 respectively.

31 members of the police force were sent to the fever hospital suffering from typhoid and para-typhoid.

1825 persons were put under observation for infectious diseases during the year.

### Unhealthy, Inconvenient and Dangerous Establishments

Under law No. 13 of August 28, 1904, and arrêté of the Ministry of Interior of August 29 of the same year, the following establishments were licensed during the year 1943 viz :

	1st Class	2nd Class	3rd Class
Saha ... ..	145	671	369
Zabt ... ..	128	301	56
TOTAL ... ..	273	972	425
GRAND TOTAL ...	1670		

Of 7,748 establishments inspected during the year 1943, the sanitary conditions in 12844 were satisfactory and in the remaining 4,904 were lacking.

17 Ministerial Arrêtés were issued during the year.

Under Law No. 1 of 1904 substituted by Law No. 38 of 1941, 84 public establishments (theatres, Cinemas, etc) were inspected during the year 1943.

#### General Sanitation.

(1) The activities of the Sanitation Section during the year 1943 can be summarised as follows.

##### 1. Water.

Samples of water were regularly taken from the different main water supplies of the City, Giza and Helwan, in order to ensure their purity.

Samples of water were also taken from other parts of the City and swimming baths

##### (2) Free Water Taps.

3 new free water taps were installed in Cairo.

##### (3) Military Orders Issued under Martial Law.

(1) Military order No. 3 (1943) regarding protection of Cairo water intakes. It forbids the dumping of refuse, or sewage matter on the bank of the Nile between the Cairo water intake at Rod El Farag and Embaba Bridge.

(2) Military order No. 6 (1943) forbids the dumping of sewage matter on a site of land in Geziret Badran rented by Hussein Said.

(3) Military order No. 386 (1943) regarding the cleanliness of lodgings.

(4) Military orders Nos. 1 and 9. (1943) : forbid the building of ovens or furnaces for stewing beans on 2 sites of land at Rod El Farag the property of heirs of Hassan Eff. Fahmy and the wakf of Said Pasha.

(5) M.O. dated August 12, 1943 providing for the removal of hutinents situated on El Malik El Moez street, Mataria.

(6) Military order providing for the disconnection of water mains from certain houses.



(4) *Quack Doctors.*

The quack doctors squad continued its activities against quack doctors and persons trading in drugs without permits.

*Complaints.*

Some 2188 complaints against deficient sanitary installations in dwellings and dumping of rubbish on public roads were received during 1943 and dealt with.

3443 permits were issued during the year for the evacuation of private cesspits.

NUMBER OF MILK SAMPLES TAKEN DURING 1943 AND THE RATE OF ADULTERATION

Number of Samples	Adulterated Samples						Total number of adult. samples	Number of genuine samples	Total Percentage of adulteration
	Skimming		Addition of water		Both skimming and addition of water				
	No. of Samples	Rate of adult.	No. of Samples	Rate of adult.	No. of Samples	Rate of adult.			
22,890	1,315	5.7 %	654	2.9 %	370	1.6 %	2,339	20,551	10.2 %

LIST OF CONTRAVENTIONS MADE DURING THE YEAR 1943 IN APPLICATION OF THE FOLLOWING ACTS :

No. of Procès-Verbaux drawn up under law No. 48 of 1941	No. of Procès-Verbaux drawn up against milk vendors under Arrêté of Ministry of Interior dated 18.5.1925	No. of Procès-Verbaux drawn up under Arrêté of the Ministry of Interior dated 13.1.15 re Itinerant Vendors	No. of Procès-Verbaux drawn up under Arrêté of Cairo Governorate dated 27.3.1911. re Internal Markets
2,888	1,663	566	555

Number of milk vendors who were licensed	...	...	...	...	567
„ ambulant vendors who were licensed	...	...	...	...	167
„ cases of food poisoning	...	...	...	...	524
„ complaints received by the section and verified	...	...	...	...	523

TABLE No. 126.—GIVING NUMBER, QUANTITY AND KIND OF FOODSTUFFS DESTROYED BY CONSENT OF OWNERS, AND NUMBER OF SPECIMENS TAKEN AND THE RESULTS OF THEIR ANALYSIS

Articles of Food	Foodstuffs destroyed					Samples taken					Percentage of adulteration	Percentage of decomposition	Remarks
	No.	Bottle	Tin	Litre	Oke	No. of Samples	Genuine	Adulterated	Decomposed	No result			
A.—Fresh Foods :													
Fruits and vegetables...	53,485	—	—	—	11,920	—	—	—	—	—	—	—	
Fish ... ..	—	—	—	—	4,692	—	—	—	—	—	—	—	
Meat ... ..	520	—	—	—	1,902	—	—	—	—	—	—	—	
Poultry ... ..	1,964	—	—	—	101	—	—	—	—	—	—	—	
B.—Cooked or Prepared Foods ... ..	2,253	—	—	—	8,099	—	—	—	—	—	—	—	
C.—Preserved Foods :													
Jam ... ..	—	—	—	—	—	12	12	—	—	—	—	—	
Milk and its products...	—	—	439	—	—	—	—	—	—	—	—	—	
Vegetables and fruits ... ..	—	—	4,966	—	—	145	66	—	79	—	—	54.5%	
Meats (preserved or dried)...	—	—	69	—	3,214	—	—	—	—	—	—	—	
Salted fish and sardine ... ..	—	—	3,504	—	43	—	—	—	—	—	—	—	
Other articles of foods (e.g. pickles) ... ..	—	—	3,804	—	—	8	6	2	—	—	—	—	
D.—Oils :													
Olive oil ... ..	—	—	—	—	—	699	614	60	25	—	8%	Quantities of destroyed oil included with masli.	8.5%
Sesame oil ... ..													
Linseed oil ... ..													
Lettuce oil ... ..													
Oat oil ... ..													
Cotton seed oil ... ..													
Other oils fit for food ... ..													





## Boulac Health Group

### *Chest Diseases Section :*

Number of new patients treated during the year 1943 was 9454 of which 782 were T.B. cases. Deaths were 237

Old patients treated during the year amounted to 11,115 persons distributed as follows :

- 7102 T.B. cases.
- 3751 under observation.
- 148 contacts.
- 114 other chest diseases.

**11,115**

The work done by this section was as follows :

- 2819 Home visits            { 2353 by nurses.  
                                      { 466 „ doctors.
- 681 Pneumothorax
- 2214 sputum analysis       { 1954 new cases (575 were positive).  
                                      { 260 old „ (34 „ „ „ )
- 418 X ray                     { 290 new cases ... (136 were positive)  
                                      { 102 old cases ... (all were positive)  
                                      { 26 under observation (3 were positive).
- 2453 patients treated at home (15 were positive).
- 907 contacts                { 419 children            { 15 were positive.  
                                      { 488 adults
- 277 sanatorium discharges { 163 sputum positive.  
                                      { 114 „ negative.

Their condition was as follows :

- 130 improved                105 got worse.
- 24 stationary                18 died.

### *Ear, Nose and Throat section*

This section was opened in April 1943 where 3525 new patients, and 1000 old patients were treated.

211 operations were made of which 75 were major. All were completely cured.

### *Midwifery and Children Section.*

The following were treated during the year:

- 9751 old pregnant.
- 2010 new pregnant.
- 1283 deliveries.
- 23366 children treated as follows :
  - 2796 Enteritis.
  - 1761 Pulmonary diseases.
  - 27 Infectious diseases.
  - 73 Congenital syphilis.
  - 1169 Skin diseases.
  - 2215 Other diseases.
- 15325 Old cases.



*Endemic diseases section.*

This section was opened on August 15, 1943.

The number of cases treated amounted to 1671 distributed as follows :

- 83 Dysentery (44 cases treated, all were cured).
- 640 Urinary and Intestinal Schistosomiasis (141 cases were completely treated of whom 111 were cured).
- 243 Ancylostoma (143 cases treated).
- 349 Ascaris (257 cases treated).
- 295 Other Parasites (25 treated).
- 4412 Outpatients.
- 3617 Injections against Schistosomiasis.
- 270 Injections against Dysentery.

*Ophthalmic Section.*

Number of cases treated in this section during the year was 19602 distributed as follows :

- 4704 cured.
- 3943 improved.
- 714 discontinued treatment.
- 78815 under treatment of whom 58 were in-patients.

*In-patient section.*

This section was opened on August 18, 1943.

254 patients were admitted there in distributed as follows :

- 130 cured.
- 84 improved.
- 17 no improvement.
- 5 died.
- 18 still under treatment.

*Venereal and Skin Diseases Section.*

(1) Patients suffering from Gonorrhœa :

Under treatment from previous year : 123 patients.

New patients ... .. 2038.

Of whom ... .. 648 were cured.

236 did not complete their treatment.

455 remaining.

(2) Patients suffering from syphilis :

Under treatment from 1942——— 87 patients.

New patients ... .. 1741

Of whom ... .. 238 were cured.

1272 improved.

98 did not complete treatment.

220 remaining.

(3) Patients suffering from other skin diseases 23182.

### *Gynecology-obstetric Section*

5110 cases were examined (2044 new cases and 3066 old cases).

150 cases were examined for W.R. of which 74 were positive.

95 lectures were given.

6922 visits were paid, 85 to sick pregnant.

4 to sick puerperals, 543 to pregnant in the 9th month.

5754 to puerperals and 522 to other cases.

1283 deliveries were conducted, 250 of which by the midwife.

1023 by the assistant nurse and one by the doctor.

Foetal deaths. 14 : one case in the first 3 months.

one case in the 2nd 3 months.

8 cases after the 6th month.

Neonatal deaths, 4 cases in the first month.

### *Dental Section*

This section was opened on May 8, 1943.

Work done was as follows :

3280 new patients distributed as follows :

2287 under treatment.

973 extractions.

20 different operations.

### *Surgical Section*

This section was opened on May 4, 1943. 8264 cases were examined of which 3687 were new cases and 4577 old.

33 operations were done of which 32 cases were cured and one case improved.

### *Medical Diseases Section*

This section was opened on March 4, 1943. 19314 cases were treated of which 10562 were new cases and 8752 old cases.





